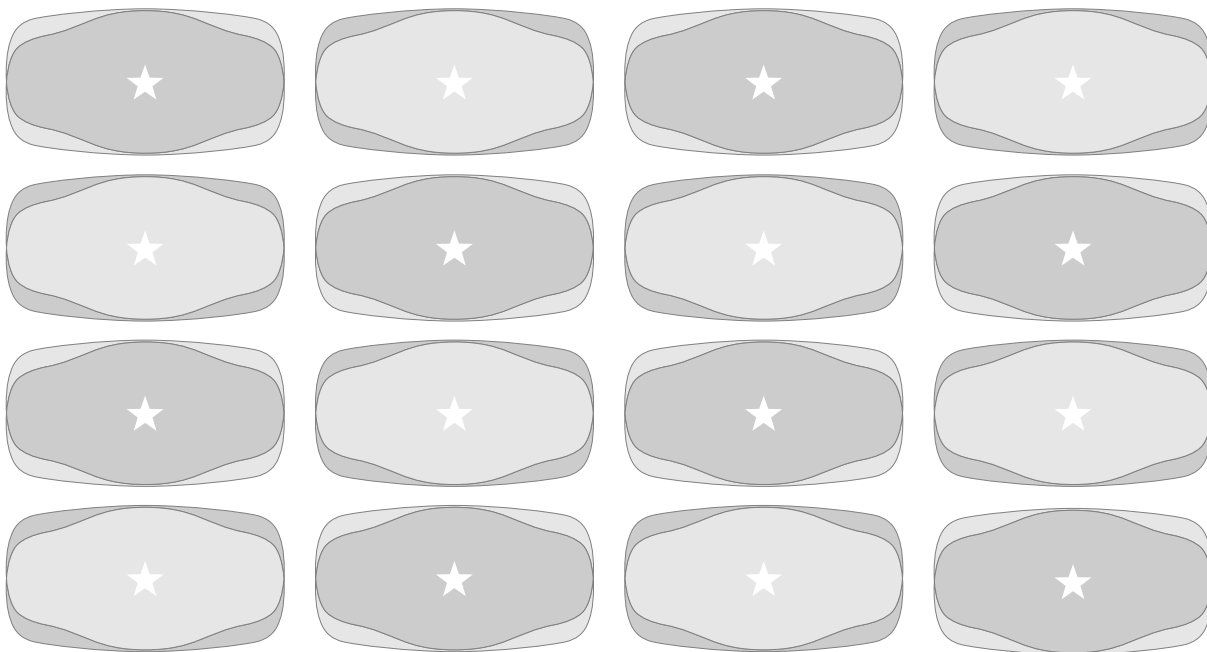


Office Color Printer

**N1000/N2000**

# User's Guide



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# Notations About Text

## *Conventions*

To ensure the safe and most efficient use of this printer, important information is provided under the headings listed below. Before you use this guide, make sure that you understand what these headings mean and remember the important information described under these headings.



### **Warning**

- Failure to follow these instructions could result in fatal or serious injury. Always remember and follow the guidelines and advice described under this heading to ensure your own safety and the safety of other people working around the printer.



### **Caution**

- Failure to follow these instructions could lead to mistakes in the use of printer and result in minor injury or serious damage to the printer. Always remember and follow the guidelines and advice described under this heading to ensure safe use of the printer.



### **Important**

- Instructions and guidelines for operation of the printer provided under this heading describe restrictions and other important information which if ignored could cause minor damage to the printer or other equipment or result in the loss of valuable data. Always remember and follow the guidelines and advice under this heading to avoid mistakes in procedure.



### **Note**

- Information under this heading includes tips and hints that will help you avoid minor problems and use the printer more efficiently.

## *Illustrations and Screen Examples*

The illustrations and screen examples used in this guide were created with the N1000 but they also apply to the N2000. Operations described herein apply to both models.

## ***Abbreviations***

Throughout this document the following abbreviations are used in text.

- Microsoft® Windows® Millennium Edition is abbreviated as “Windows Me”
- Microsoft® Windows® 98 is abbreviated as “Windows 98”
- Microsoft® Windows® 95 is abbreviated as “Windows 95”
- Microsoft® Windows® XP is abbreviated as “Windows XP”
- Microsoft® Windows® 2000 is abbreviated as “Windows 2000”
- Microsoft® Windows NT® is abbreviated as “Windows NT”
- Microsoft® Windows® is abbreviated as “Windows ”
- The term “GARO”, used in the name of this printer driver, is an acronym for “Graphic Arts Language with Raster Operations”, a printer language of creating raster images.

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# Safety Warnings and Precautions

Read and follow all the warnings and guidelines described below to prevent the hazards of fire or electrical shock and ensure safe use of this printer.



## Warning

### ■ Location



- The electrical contacts inside the printer become extremely hot during normal operation. To avoid causing a fire, never store flammable substances like alcohol, thinner, etc. near the printer.

### ■ Power Supply



- To avoid personal injury from an electrical shock, never handle the power cord or plug when your hands are wet.



- To avoid causing a fire or serious electrical shock, make sure that the power plug is securely and completely inserted into the power source.



- To avoid causing a fire or serious electrical shock, always use the power cord provided with this printer, and do not use this power cord with any other electrical device.



- To avoid a fire or serious electrical shock caused by a short circuit, avoid damaging the AC adapter cord or the power cord. Never attempt to modify the power cord in any way. Never apply force to the cord by pulling on it, and never place a heavy object on the power cord.



- To avoid a fire or serious electrical shock, connect the printer power cord to an independent power source that is not shared by other equipment or appliances.



- To avoid a fire or serious electrical shock, never knot the power cord or wrap it around itself.



- To avoid a fire hazard, occasionally disconnect the power cord from the printer and the power supply and use a soft dry cloth to clean the cord connectors and the connection points. Leaving the cord plugged in and not cleaned for a long period, especially in an area subject to dust, oil, and high humidity, could cause the insulation material to deteriorate.

### ■ In an Emergency...



- To avoid a fire or serious electrical shock, if the printer emits smoke or a strange odor, immediately press the Power button to switch the printer off and unplug the power cord from the power supply. Discontinue using the printer and call for service.

### ■ Cleaning the Printer



- Use only a damp, clean cloth to clean the surfaces of the printer. The electrical contacts inside the printer become hot during normal operation. To avoid a fire or serious electrical shock, never use alcohol, benzene, thinner, or any other type of flammable liquid cleaner to clean the printer.

### ■ Pacemakers

- This printer generates a low magnetic field. If anyone wearing a pacemaker experiences discomfort while working around the printer should leave the area. Consult a physician before continuing to work around the printer.



## Caution

### ■ Printer location



- To avoid damage to the printer or possible personal injury, place the printer on a flat, stable surface that is safe from sudden shocks or strong vibrations to ensure that it will not fall.



- To avoid damage to the printer which could result in a fire or electrical shock, place the printer in a location where it is not exposed dust, direct sunlight, high temperature, or high humidity. Use the printer location in an environment where temperature and humidity are within the ranges of 5°C~35°C (41°F~95°F) and 10~90% RH (with no condensation).



- To avoid anything entering the printer and causing a fire, never place the printer on a heavy wool or shag carpet.



- There are ventilation holes on the left side of this product, so when you install it, make sure the holes are not blocked by a wall or other object. Install so that the holes are at least 30cm (12 in.) from a wall or other object. If the ventilation holes are blocked, the inside of this product may become overheated, resulting in fire.



- To avoid the hazard of a dangerous fire, keep the area around the power supply where the printer power cord is connected so you can disconnect it immediately if the printer starts operating abnormally (emitting smoke or odd noises, etc.).



- To ensure normal operation of the printer and avoid possible damage, never install the printer near large office equipment or any other type of electrical device that emits a strong magnetic field.

### ■ Moving the Printer



- To avoid dropping and damaging the printer or the paper feed unit or causing personal injury when moving it, always grip the printer or the paper feed unit by the lift handles provided on the left and right side of the printer or the paper feed unit.



- To avoid breaking a paper cassette and personal injury, always remove the cassettes before lifting and moving the printer or a paper feed unit.
- The Model N2000 weighs 16 kg (35 lb.) To avoid back strain or other personal injuries, at least two people, lifting together at the front and back of the printer, are required to move the printer.

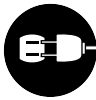
### ■ Power Supply



- To avoid damaging the power plug, which could cause a short circuit and cause a fire or electrical shock, never pull on the power cord to unplug the cord from the power supply. Always grip the plug to remove it from the power supply.



- To avoid a fire or electrical shock, do not use an extension cord.



- To prevent fire or electrical shock, never use a power supply source other than the one rated for the printer in the country where you purchased the printer.

AC 100-127 V, 50/60 Hz

AC 220-240 V, 50/60 Hz

### ■ Cleaning the Printer



- To avoid minor burns or minor injury from moving parts, before cleaning the printer always press the Power button to switch off the printer then unplug the power cord from the power supply and allow the electrical contacts inside the printer to cool.

### ■ Printhead and Ink Tanks



- Store the ink tanks out of the reach of small children. If a child accidentally ingests ink from an ink tank, contact a physician immediately.



- To avoid staining clothing or your work area with spilled ink, never shake or drop the printhead or an ink tank.



- The electrical contacts of the printhead become extremely hot during normal operation. To avoid minor burns, never touch the electrical contacts after removing the printhead from the printer.

#### ■ General Caution



- There are high voltage points inside the printer. To avoid a fire or electrical shock, never attempt to disassemble the printer or attempt repairs.



- To avoid a fire or electrical shock, never use flammable sprays around the printer.



- To avoid minor injury from moving parts inside the printer, never open a cover or insert your hand into the printer while the printer is operating.



- To avoid a fire, electrical shock, or damage to the printer, never place anything on the printer such as small metal objects like staples, paper clips, or any type of liquid container, especially containers of flammable liquids which could fall accidentally into the printer.



- To prevent a fire hazard or dangerous electrical shock, if a foreign object falls or a liquid spills into the printer, press the Power button immediately to switch the printer off then unplug the printer power cord from the power supply. Call for service and do not use the printer until it has been checked by a qualified service technician.



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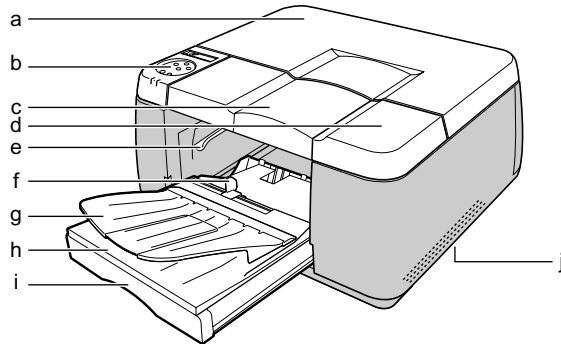
# 1

## Before Using the Printer

This section describes printer parts and procedures you should know before you use the printer.

# Printer Part Names

## ■Front View



### **a Back upper cover**

Remove to install the printhead or to remove jammed paper. (→P.5-10, P.6-15)

### **b Operation panel**

Provides Power button, Online button, Ink Replace button, LCD display, and other important buttons used to operate the printer. For details, see Chapter 4 “Using the Operation Panel Buttons”. (→P.4-4)

### **c Front upper cover**

Remove to set paper in the tray or to remove jammed paper. (→P.2-15, P.6-15)

### **d Right cover**

Open to replace ink tanks. This cover is normally locked. To unlock this cover for removal in order to replace ink tanks, press the Ink Replace button on the operation panel.

### **e Manual feed lever**

Releases the paper feed roller to allow manual paper feed. Raise this lever to feed paper manually for printing or to remove jammed paper. (→P.2-15, P.6-15)

### **f Slide lever**

Slide to the left or right to fit the size of the paper for manual feeding. (→P.2-15)

### **g Tray**

Set paper here for manual feed printing. Also functions as the paper exit

tray during normal printing. (→P.2-15)

**h Cassette cover**

Protects paper loaded in the cassette.

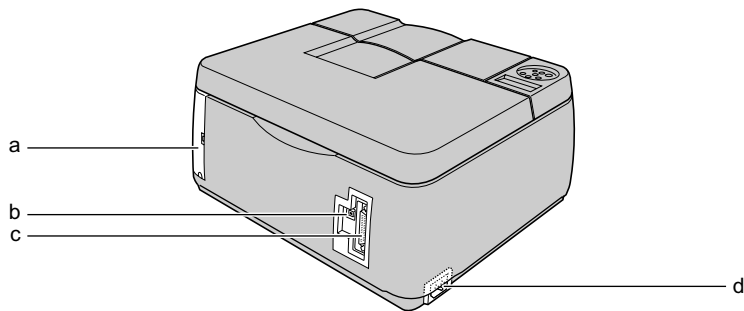
**i Cassette 1**

The standard paper cassette provided with the printer is a universal type cassette that can hold a variety paper sizes and types: plain paper, coated paper, transparencies (OHP film), etc. (→P.2-7)

**j Lift handles**

Grasp these handles provided on the left and right side to lift or move the printer.

■ **Back View**



**a Connector cover**

Protects the expansion slot. The standard model provides one slot, and the network model provides one slot for a network interface board (NB-11FB). (→*Setup Guide*)

**b USB port**

Provides a connection point for a USB cable connected to the USB port of the computer. (→*Setup Guide*)

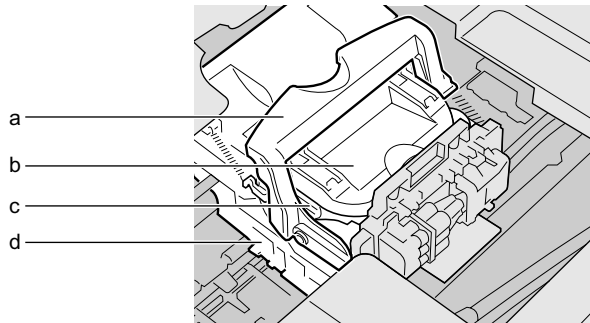
**c Parallel port**

Provides a connection point for a parallel cable connected to the parallel port of the computer. (→*Setup Guide*)

**d Power connector**

Provides a connection point for the printer power cord.

## ■ Under the Back Upper Cover



### **a Printhead lock lever**

Locks the printhead lock cover. Pull down to open then install the printhead. (→*Setup Guide*)

### **b Printhead lock cover**

Protects the printhead. Raise to open and install the printhead. (→*Setup Guide*)

### **c Printhead**

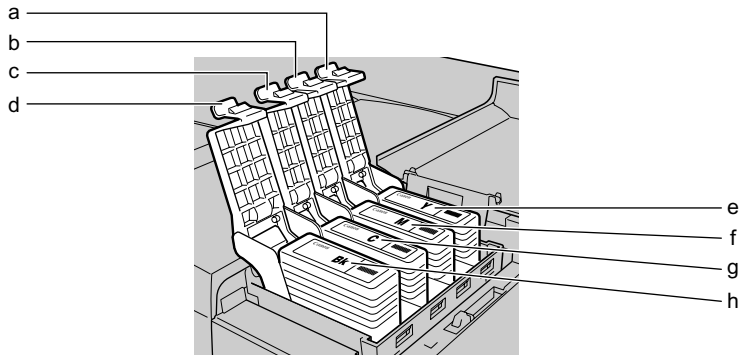
Equipped with the nozzles that supply the inks for printing. This important part is not installed before shipping, so you must install it before you can use the printer. (→*Setup Guide*)

### **d Carriage**

Holds the printhead and moves it left and right across the paper during printing.



## ■ Under the Right Cover



**a Y ink tank cover**

**b M ink tank cover**

**c C ink tank cover**

**d Bk ink tank cover**

The ink tank covers protect the tanks and lock them in place. To replace an ink tank, press the Ink Replace button on the operation panel to release the right cover. Open the right cover then raise the ink tank cover.

**e Y ink tank**

**f M ink tank**

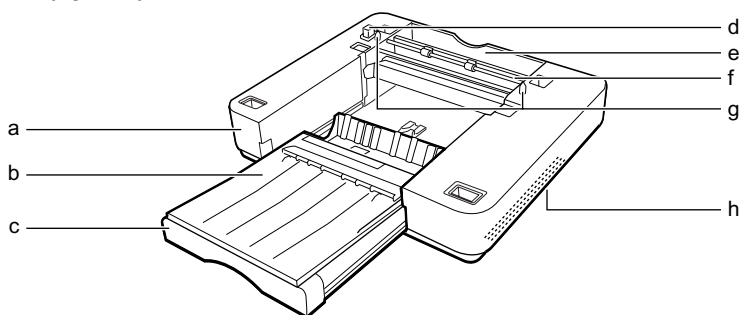
**g C ink tank**

**h Bk ink tank**

These tanks hold the ink. The ink tanks are not installed before shipping, so you must install all the ink times before you can use the printer.

(→*Setup Guide*)

## ■ Paper Feed Unit (option)



### **a Paper feed unit**

A paper feed unit installed below the printer provides an additional paper feed source. The Model N1000 allows installation of two paper feed units Cassette 2 (middle) and Cassette 3 (bottom). The Model N2000 allows installation of one paper feed unit, Cassette 2 (bottom).

### **b Cassette cover**

Attached to Cassette 2 (or Cassette 3) to protect paper loaded in the paper cassette. The shape of the cassette cover for Cassette 1 is different.

### **c Cassette 2 (Cassette 3)**

Paper Cassette 2 (or Cassette 3).

### **d Paper feed unit connector**

This important connector connects the paper feed unit. Avoid hitting or applying great force to this connector.

### **e Back cover**

### **f Back inner covers**

Open these covers and the back cover to remove jammed paper from Cassette 2 (or Cassette 3).

### **g Guide pins**

These two pins, located at the back of the paper feed unit, align the paper feed unit correctly for installation.

### **h Lift handles**

Grasp these handles provided on the left and right side when lifting or moving the paper feed unit.

# Switching the Printer On and Off

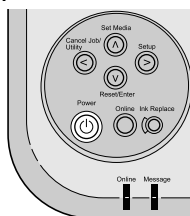
Follow the procedure below to switch the printer on and off.

The examples below demonstrate normal operation of the printer after it is set up and ready for normal operation. If the printer has not been set up completely, follow the procedures in the Setup Guide to complete the setup procedures before you execute the procedures below.

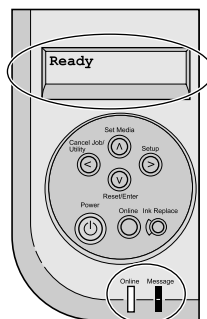
## Switching the Printer On

Switch on the printer before you execute a print job from the computer.

- 1 Press the Power button.



The Online lamp and Message lamp flash for a few seconds while the printer warms up. After the printer has warmed up, the Online lamp lights and remains on, and “Ready” is displayed.



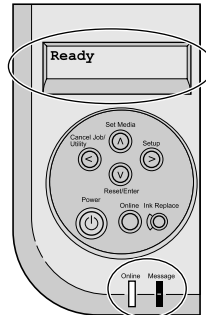
The Message lamp flashes when a message is displayed. Read the message and perform the required procedure.(→P.6-11)

If the display or Online lamp do not light, check the power cord connections at the printer and the power supply and make sure that they are secure.  
(→Setup Guide)

## Switching the Printer Off

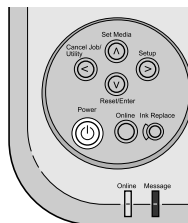
When you are finished using the printer, follow this procedure to switch the printer off.

- 1 Check the display to make sure that a print job is not in progress.



If you see an error message displayed, follow the procedure to correct the problem, and make sure the print job has completed. If a print job is in progress, wait for the print job to complete before switching off the printer.

- 2 Press and hold down the Power button for two seconds then release it.



"Please wait ..." is displayed for a few seconds, then the printer goes off.

# Setting the Printer Online and Offline

While the printer is on, it can be set online or offline.

When the printer is online, the printer can accept data from the computer to execute a print job. The printer enters the online mode automatically every time the printer is switched on.

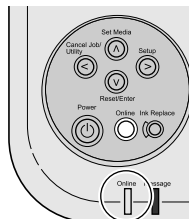
When the printer is offline, the printer cannot receive data to execute a print job. The printer must be set in the offline mode to use the operation panel to open the menus and make selections. The printer enters the offline mode automatically when an error message alerts you about a problem so you can perform the procedure to correct the problem.

When you are finished performing settings with the operation panel and display, or after you have corrected an error, press the Online button to set the printer online again for printing.

## Setting the Printer Online

Follow this procedure to set the printer online.

- 1 Press the Online button. The Online lamp lights.



The printer can print while the Online lamp is on.



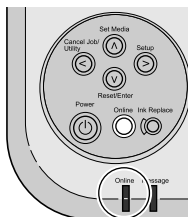
### Note

- Pressing the Online button repeatedly switches the printer between the online and offline modes.

## Setting the Printer Offline

Follow the procedure below to set the printer offline.

- 1 Press the Online button. The Online lamp goes off.



When the Online lamp off, the printer is offline.



### Note

- Pressing the Online button repeatedly switches the printer between the online and offline modes.

# 2

## Print Media You Can Use

This chapter describes the types of print media that can be used and how to load each type.

# Print Media That Can Be Used

A variety of print media can be used with this printer. The size and types of paper or special media, the print area for each type, and other details are described below.



## Note

- For more details about Canon print media, please refer to the instructions provided with each package.

## *Types of Print Media*

The types of paper and other print media are described below.

### ■ Plain Paper

Canon original inks produce on plain paper images of brilliant colors that resist fading due to exposure to light.

Canon product:  
Bubble Jet Paper (LC-301)



## Note

- The water resistance of Color Bubble Jet Paper (LC-301) is improved.
- You can also use plain copy paper (64 ~ 105 g/m<sup>2</sup>) intended for use on copy machines.

### ■ Coated Paper

Specially coated for use with BJ printers, coated paper reproduces brilliant colors without blurring. This media is ideal for printing materials with color graphics, photographs, and all types of color presentations for business.

Canon product:  
High Resolution Paper (HR-101)

### ■ Transparencies (OHP Film)

Highly transparent film used to produce printed color presentations with an overhead projector at conferences and presentations. Printing can be done on either side of the sheets.

Canon product:  
Color Bubble Jet Transparencies (CF-102)





## Important

- Never touch the printed surface of a printed transparency until it has dried for at least 15 minutes, and never stack printed transparencies.
- Remove each sheet from the output tray as it is ejected from the printer. To prevent smearing, never allow printed transparencies to stack on the output tray.
- Color Bubble Jet Transparencies (CF-102) should not be printed at high speed. Printing at high speed could cause double-feeding and jamming.
- Using transparencies of another manufacturer could cause them to jam.

### ■ Quick Dry Transparencies

Highly transparent film that dries quickly. Ideal for large volume print jobs with transparencies.

Canon product:

Color Bubble Jet Transparencies Quick Drying Type (CF-401)



## Important

- You must always print on the correct print side (the rough side) of this film, and load the edge of each sheet marked with the white tape into the printer first.
- To prevent a jam, do not remove the white tape from the sheet before printing. The tape can be removed after printing.

## Paper Sizes

Here is a table that lists the paper sizes and feed methods that can be used with this printer.

Paper Size		N1000				N2000		
		Cassette 1	Cassette 2 (Option)	Cassette 3 (Option)	Tray	Cassette 1	Cassette 2 (Option)	Tray
A3+	329.0 x 483.0 mm 12.95 x 19.02 in	—	—	—	—	Yes	Yes	Yes
A3	297.0 x 420.0 mm 11.69 x 16.54 in	—	—	—	—	Yes	Yes	Yes
B4 (JIS)	257.0 x 364.0 mm 10.12 x 14.33 in	—	—	—	—	Yes	Yes	Yes
A4	210.0 x 297.0 mm 8.27 x 11.69 in	Yes	Yes	Yes	Yes	Yes <sup>*1</sup>	Yes <sup>*1</sup>	Yes <sup>*1</sup>
B5 (JIS)	182.0 x 257.0 mm 7.17 x 10.12 in	Yes	Yes	No	Yes	Yes	Yes	Yes
B5 (ISO)	176.0 x 250.0 mm 6.93 x 9.84 in	No	No	No	Yes	No	No	Yes
Ledger	279.4 x 431.8 mm 11.00 x 17.00 in	—	—	—	—	Yes	Yes	Yes
Regal	215.9 x 355.6 mm 8.50 x 14.00 in	No	No	No	Yes	Yes	Yes	Yes
Letter	215.9 x 279.4 mm 8.50 x 11.00 in	Yes	Yes	Yes	Yes	Yes <sup>*1</sup>	Yes <sup>*1</sup>	Yes <sup>*1</sup>
Executive	184.2 x 266.7 mm 7.25 x 10.50 in	No	No	No	Yes	No	No	Yes
Custom	—	No	No	No	Yes <sup>*2</sup>	No	No	Yes <sup>*3</sup>

\*1. A4 and Letter size paper must be loaded vertically for short-edge feed.

\*2. Size range of paper for loading: 100 ~ 215.9 mm (Width) x 148 ~ 355.6 mm (Length)  
3.9 x 8.5 in. (Width) ~ 5.8 x 14 in. (Length)

\*3. Size range of paper for loading: 100 ~ 329 mm (Width) x 148 ~ 483 mm (Length)  
3.9 x 13 in. (Width) ~ 5.8 x 19 in. (Length)



### Note

- Skew may occur when feeding paper manually from the tray. If this occurs, remove all of the paper from the paper cassette and print.

## Maximum Stack Size

The table below describes for each media type the maximum number of sheets that can be loaded for the paper feed source.

Media type		N1000 (Sheets)				N2000 (Sheets)		
		Cassette 1	Cassette 2 (Option)	Cassette 3 (Option)	Tray *1	Cassette 1	Cassette 2 (Option)	Tray
Plain Paper		250	250	250	10 <sup>*2</sup>	250	250	10 <sup>*2</sup>
Coated Paper (HR-101)	A3+	—	—	—	1	50	50	1
	A3	—	—	—	1	100	100	1
	B4 (JIS)	—	—	—	1	100	100	1
	A4	150	150	150	1	150	150	1
	B5 (JIS)	150	150	—	1	150	150	1
	Ledger	—	—	—	1	100	100	1
	Letter	150	150	150	1	150	150	1
Transparencies (CF-102, CF-401)		50	50	50	1	50	50	1

\*1. When feeding manually with the tray set, add one sheet of plain paper to the stack.

\*2. For Canon Bubble-Jet Paper LC-301, use only one sheet.

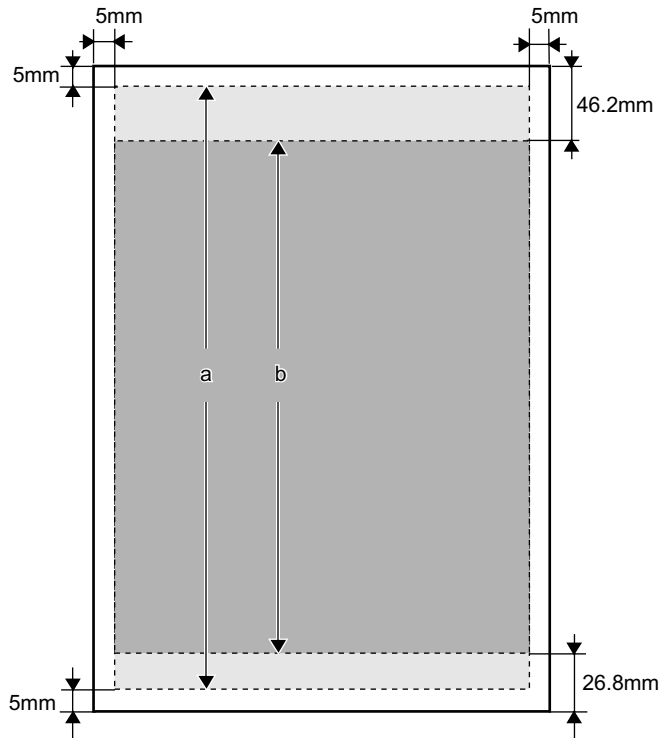


### Important

- To prevent jams or damage to the printer, never load too many sheets in a paper cassette. Load only the number of sheets recommended for the paper or other print media in the table above, or never load higher than the load limit mark, whichever is less.

## Printing Area

This printer can print in the area (a) show in the illustration. However, printing in this area could cause poor print quality or misfeeds. Printing in area (b) is recommended for best results.



## Handling Print Media

Observe the following points regarding loading and handling paper and other print media:

- Print media that cannot be used:
  - Folded
  - Curled
  - Wrinkled
  - Looseleaf sheets or any type of punched paper with holes.
- For details about handling and storing print media, please refer to the instructions provided with the package.

# Loading Paper Cassettes

This is the general procedure for loading a paper cassette:

- Load the print media in the paper cassette.
- Select the media size and type on the printer operation panel.
- Start the print job on the computer.



## Important

- Store unused paper and other media in its original package. Store the package in a cool, dry location that is not exposed to sunlight.
- To prevent jams, never remove a paper cassette during printing.

## Loading the Paper Cassette

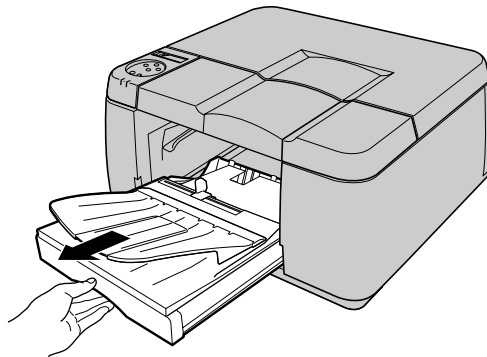
Follow the procedure below to load the paper cassette. (The procedure is the same for loading optional paper cassettes.)



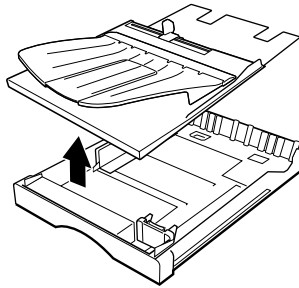
## Note

- The paper cassette holds approximately 250 sheets of standard weight (64 to 105 g/m<sup>2</sup>) plain paper. (→ P.2-5)

- 1 Remove the cassette from the printer.

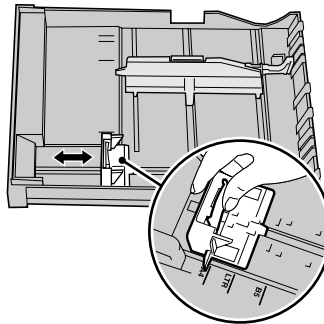


- 2** Remove the cassette cover.



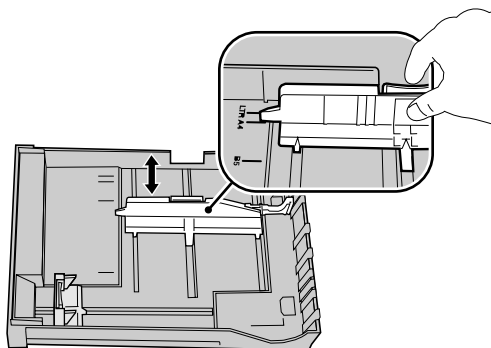
- 3** Pinch the lever on the length guide so it moves freely and move the guide to the holes for the size of the paper.

Marks for standard paper sizes are provided on the length guide. Move the guide to the desired mark.

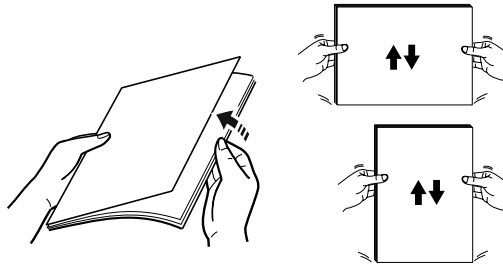


- 4** Pinch the lever on the width guide so it moves freely and move the guide to the paper size mark.

The width guide can be set and locked every 0.5 mm (0.02 in.). Set the width guide slightly larger than the desired paper size.

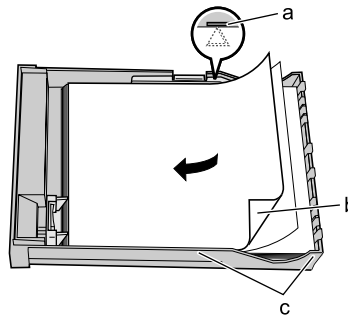


- 5** Pick up a stack of paper and fan it to remove static cling. Tap the edges of the stack against a flat surface to align the edges.



- 6** With the print side (b) facing down, load the stack (c) in the cassette with the length guide against the bottom of the stack.

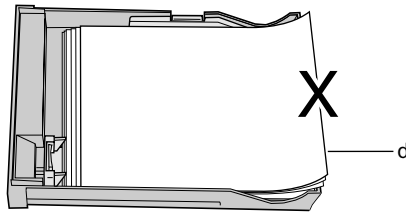
You can fill the cassette up to the load limit mark (a) marked on the width guide.



## Important

- Overloading the paper cassette can cause paper jams. Never load paper higher than the load limit mark (a), and never load more than the number of sheets recommended for special print media. (→P.2-5)
- A large gap at the side of the stack (c), or incorrect alignment of the stack here, may cause poor print results due to paper skew during feeding. Make sure that the side is aligned correctly and that the stack is snug against this side of the cassette.

- To avoid paper jams, make sure that the trailing edge is aligned square with the length guide, and make sure that the edges at (d) are straight and not slanted.



- Wait for all of the paper or other print media in the cassette to be used up before loading more paper.
- Never mix different types of paper or other print media in the same stack.
- When printing transparencies, always load one sheet of plain paper the same size as the transparencies on the bottom of the stack.

## 7 Move the width guide until it rests lightly against the side of the stack.

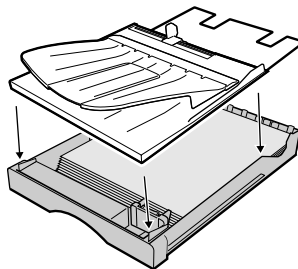


### Important

- To ensure smooth paper feed from the cassette, make sure that the width guide is snug and not too tight against the side of the stack. If the width guide is too tight, or if there is a gap between the paper and the guide, this may cause paper to feed incorrectly.

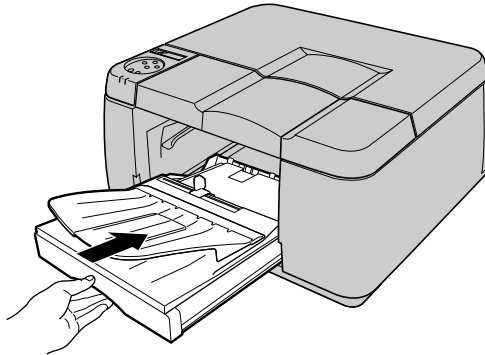
## 8 Install the cassette cover.

Align the four pegs on bottom of the cassette cover with the holes in the cassette below and set the cover on the cassette.



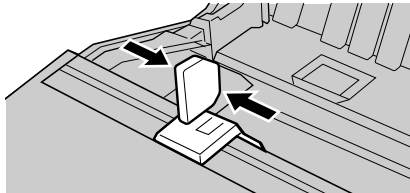


- 9** Set the paper cassette in the printer.  
Push the paper cassette completely into the printer.



**Important**

- You must set the slide lever to the center position to enable paper feed from the cassette.



## Selecting the Print Media Size and Type

After loading paper or other print media in the paper cassette, you must use the operation panel menus to select the type and size of the paper or other print media loaded in the cassette. If you fail to perform this setting, the computer and printer will not be able to print correctly. For more details about size settings, see Print Media That Can Be Used. (→P.2-2)

Here is a summary of the print media settings.

Print Media Name	Operation Panel Setting (Media Type)
Plain paper Bubble Jet Paper (LC-301)	Plain Paper
High Resolution Paper (HR-101)	Coated Paper
Color Bubble Jet Transparencies (CF-102)	Transparency
Color Bubble Jet Transparencies Quick Drying Type (CF-401)	Quick Dry Tran
See Note below.	Special 5



### Important

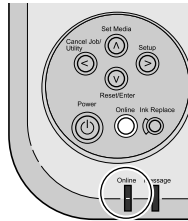
- Up to three paper cassettes (Cassette 1, Cassette 2, Cassette 3) can be used with the N1000. Make sure the paper size and type are set for each paper cassette.
- With the two cassettes (Cassette 1, Cassette 2) of the N2000, the “Media Size” setting is set automatically for the size of the media loaded in the paper cassette, so you need only to perform the “Media Type” setting. However, the Media Size setting is not performed automatically for B5-JIS size; you must perform both the “Media Size” and “Media Type” settings for these sizes.



### Note

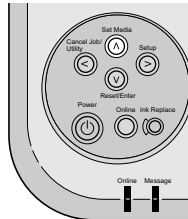
- The N1000 is shipped from the factory with the “Media Size” set for “A4” or “Letter” and the “Media Type” is set for “Plain Paper”.
- The N2000 is shipped from the factory with the “Media Size” set for “B5-JIS” and the “Media Type” set for “Plain Paper”.
- Select “Special 5” for the “Media Type” in the following cases:
  - Paper is not drying enough while printing with “Standard” selected for “Print Quality” in the GARO printer driver.
  - Printing is blurred or low quality while printing on a coated paper not recommended by Canon with “Standard” or “High” selected for “Print Quality” in the GARO printer driver.

- 1 Press the Online button to switch off the Online lamp.



The printer is set offline.

- 2 Press the Set Media button.



The Set Media menu opens.

- 3 Press < or > to select the cassette and press ▼.

Select the setting for the loaded cassette: Cassette 1, Cassette 2, or Cassette 3.

If your printer is a Model N2000 and A4, B4, A3, A3+, Letter, Legal, or Ledger size paper is loaded in the paper cassette, the size is selected automatically so you can go to Step 6.

```
Media Set Menu
Cassette 1      →
```

- 4 Press < or > to display "Media Size" and press ▼.

```
Cassette 1
Media Size     →
```

- 5** Press < or > to display the media size and press V.

Media Size  
B5-JIS →

An equals sign (=) displayed to the left of the setting indicates the current Media Size selection.

- 6** Press < or > to display “Media Type” and press V.

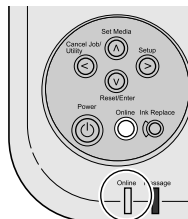
Cassette 1  
Media Type →

- 7** Press < or > to display the desired media type and press V.

Media Type  
Coated Paper →

An equals sign (=) displayed to the left of the setting indicates the current Media Type selection.

- 8** When you are finished, press the Online button to light the Online lamp.



“Ready” is displayed on the operation panel.

# Loading the Tray

This is the general procedure for loading the tray:

- Start the print job on the computer.
- Remove printed sheets from the output tray.
- Set the media in the tray.
- Press the Online button.
- After printing, remove all remaining sheets from the tray.
- Press the Online button.



## Important

- Store unused paper and other media in its original package. Store the package in a cool, dry location that is not exposed to sunlight.



## Note

- Some types of media may not feed smoothly.
- Skew may occur when feeding paper manually from the tray. If this occurs, remove all of the paper from the paper cassette and print.

## 1 From the computer, select Manual for the Media Source.

The operation panel displays “Load Media”, enters the standby mode, and waits for you to load the media.

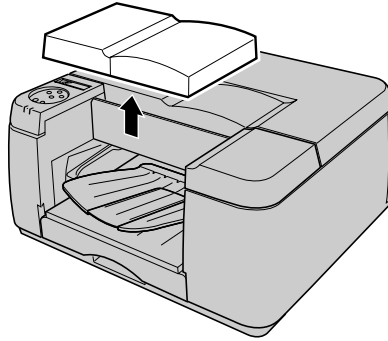
Load Media  
A4



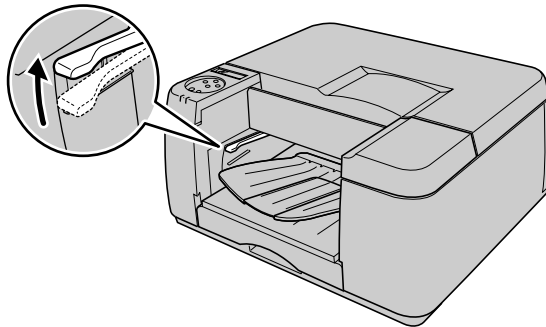
## Note

- If you press the Online button before you load the media in the tray, paper will feed from Cassette 1. If Cassette 1 is not loaded, the operation panel displays “No Media: Manual”, enters the standby mode, and waits for you to load the media.

- 2** Remove the front upper cover.

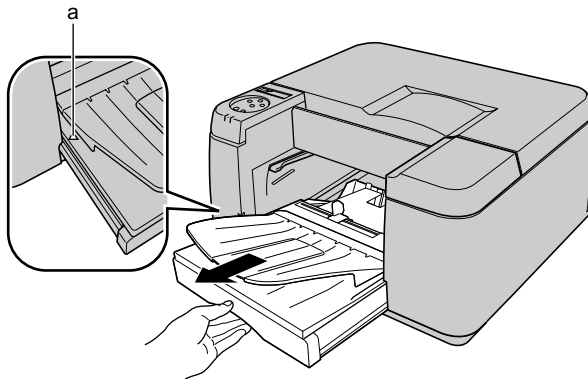


- 3** Raise the manual feed lever.



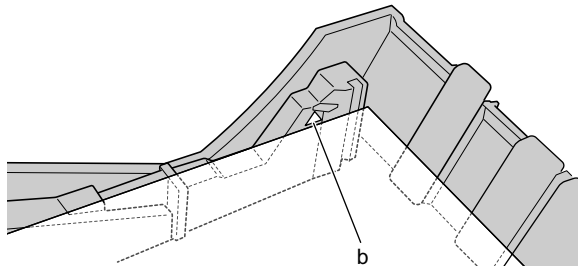
#### 4 Pull Cassette 1 to the marked position.

Align the mark (a) of the cassette cover with the position of the printer front.

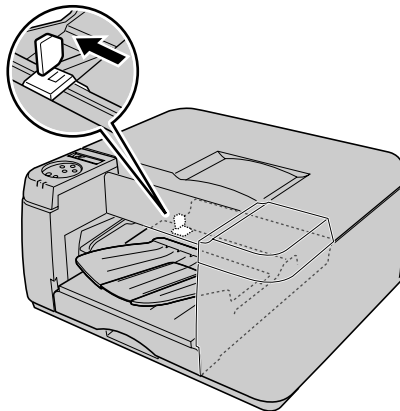


#### Important

- If there is paper in the cassette, make sure that the paper is below the load limit mark  $\Delta$  (b). If the stack is higher than this mark, remove some paper.

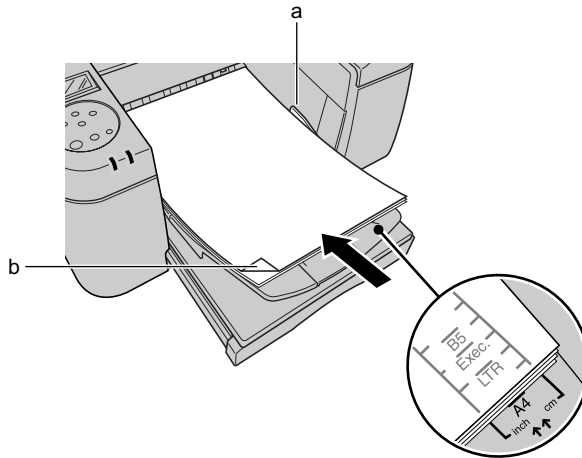


#### 5 Slide the lever to the left.



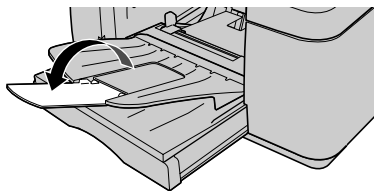
- 6** With the print side (b) down, align the stack plus one sheet of plain paper with the right guide (a), then insert into the cassette until it stops.

When you insert the media, make sure that the trailing edge of the media is located at the correct size mark on the tray.



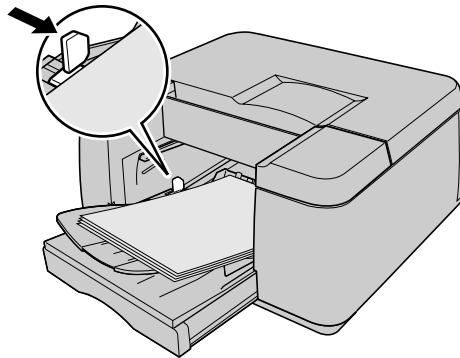
## Important

- To prevent misfeeds, make sure that the paper is not over the right guide (a).
- The number of sheets that can be loaded in the tray for manual feed is different, depending on the media type. Confirm before loading. (→P.2-5)
- To ensure effective manual feed, load the number of sheets actually required, plus one sheet. If the media runs out before the job completes, the printer will start to feed from Cassette 1. When the print job is completed, remove any remaining paper from the tray.
- When loading paper that is wider than the paper already loaded in cassette 1, you must remove the previously loaded paper and move the cassette's width guide. With the N1000, move the width guide to the LTR size position, and with the N2000 move it to the A3+ size position. Not moving the guide may result in poor medium supply.
- To print with legal paper loaded in the tray of the N1000, open the paper support then insert and move the trailing edge of the paper to the correct mark on the paper size scale.

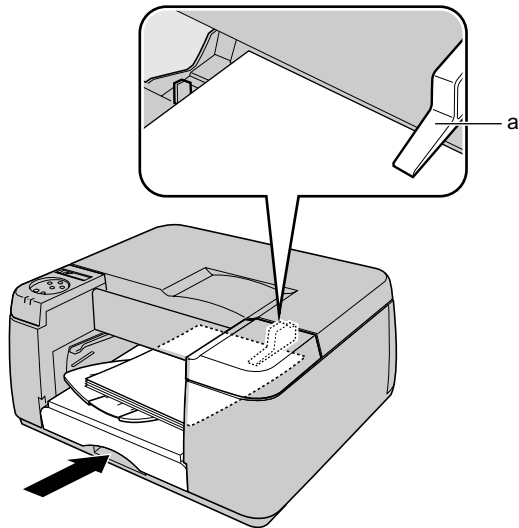




- 7** Move the slide lever until it lightly touches the media.

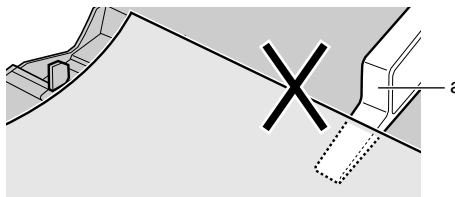


- 8** Insert Cassette 1.

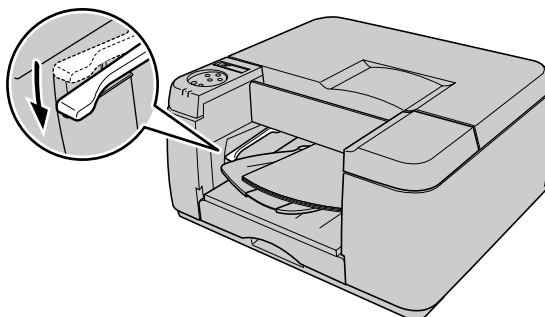


### Important

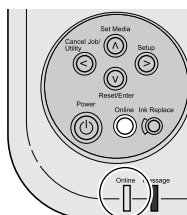
- To prevent incorrect feeding, the sheets must be set to pass below the exit guide (a).



**9** Lower the manual feed lever.



**10** Press the Online button.



The print job starts.

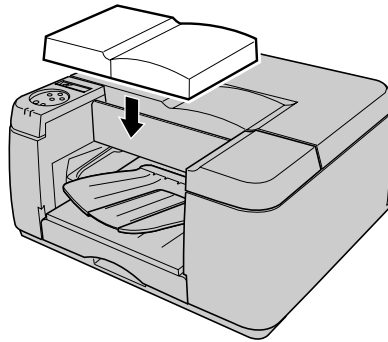
When the print job finishes, the Online lamp goes off, the Message lamp lights, and “Load Media” is displayed.



**Note**

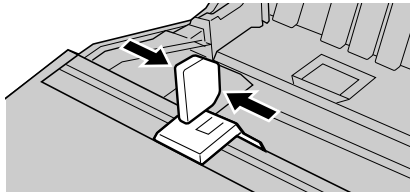
- If you press the Online button before you load the next sheet, the next sheet will feed from Cassette 1.

- 11** Remove any media remaining in the tray, move the slide lever to the center, close the paper support, then re-attach the front upper cover.



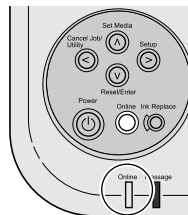
## Important

- When feeding from the paper cassettes, make sure that the slide lever is always as close as possible to the center position within its range of movement.



- If you moved the width guide of Cassette 1 at Step 6, after moving the width guide back to its original position, feed paper from the cassette.

- 12** Press the Online button.



The operation panel displays “Ready”, and the printer is ready for the next print job.



# 3

## Printing from Windows

This chapter describes the basic procedures for printing from Windows.

# Printing

To print a job from a Windows software application, use the Print command in the File menu.



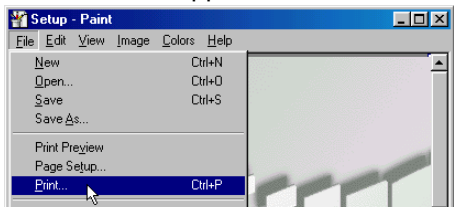
## Note

- For more details about the printer driver, refer to the printer driver online Help.
- For more details about print software functions, refer to “10 Install the Software” in Chapter 1 of the Setup Guide.

## Print Procedure

1

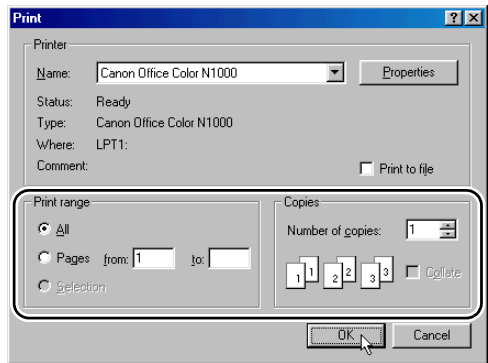
If the software application, select Print from the File menu.



The Print window opens.

2

Make sure the name of the printer is displayed in the Name box, perform the settings for the “Print range” and “Copies” group, then click the OK button.



The print job starts.



## Note

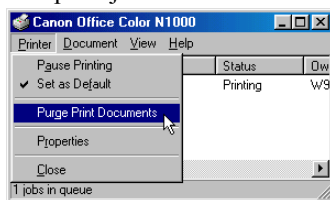
- Click the Properties button if you want to select the print media size, paper feed method, or adjust quality and color, or perform other settings.

# Canceling a Print Job

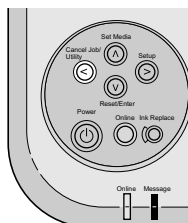
Follow this procedure to cancel a print job.

- 1** In the Printers folder, double-click the icon for the printer.
- 2** Click the name of the job that you want to cancel, click Printer in the menu bar and select Purge Print Documents.

The print job is deleted.



- 3** If the Online lamp on the printer operation panel is flashing, indicating that the print job is still processing, press and hold down the Cancel Job/Utility button for three seconds until you see "Job Cancel" displayed, then release the button.



The print job in progress is canceled.

- 4** If the Online lamp goes off and you cannot cancel the print job, then use NetSpot to cancel unneeded print jobs.
- 5** If NetSpot is not installed, press and hold down **▼** for one second and perform either a soft reset or a hard reset.

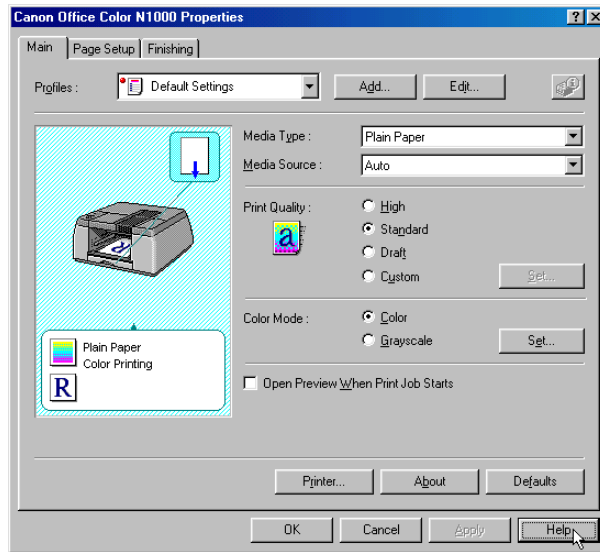
If you perform a soft or hard reset, all the print jobs received by the printer and currently in progress are erased completely and must be restarted.

# Viewing Online Help

Online Help is available to explain the functions and items of the printer driver.

## Opening Online Help

- 1 In the Printer Properties window, click the Help button.



The Help window opens.



### Note

- For more details about how to use the Help window, please refer to your operating system manual.



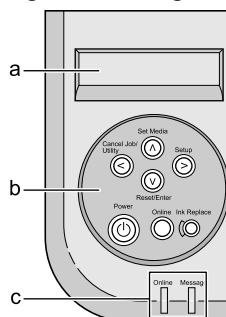
# 4

## Using the Operation Panel

This chapter describes how to use the printer operation panel buttons and functions.

# What's On the Operation Panel?

On the printer operation panel there is a display (a), seven buttons (b), and two lamps (c). The operation panel is used to indicate the current status of the printer, to display messages and settings, and to perform menu settings.



## Reading the Display

The display indicates the current status of the printer.

### ■ Standby



Line 1:

The first line of the display indicates the current status of the printer.

### ■ Print Job Processing



Line 1:

The name of the document and the name of the user are displayed for a print job in progress.

## ■ Menu Display

Utility Menu
Status Print →

Line 1:

Displays the name of the menu or submenu.

Line 2:

Displays an item for selection. A right arrow (→) indicates that items are available for selection on the same level. A down arrow (↓) indicates that items are available for selection at the next lower level.

## ■ Current Selection

Media Size
=A4 →

Line 1:

Displays the name of the submenu.

Line 2:

Displays the item or value of the setting. A setting prefixed with an equals sign (=) indicates the current selection. A right arrow (→) indicates that items are available for selection on the same level.

## ■ Error Message Display

Replace Y Tank
----------------

Line 1, Line 2:

Displays an error message if the printer requires attention, and the printer stops printing. After correcting the problem, press the Online button.

Line 2 only:

Displays error messages, but the print job can continue. In the Setup Menu the printer can be set to not display error messages.

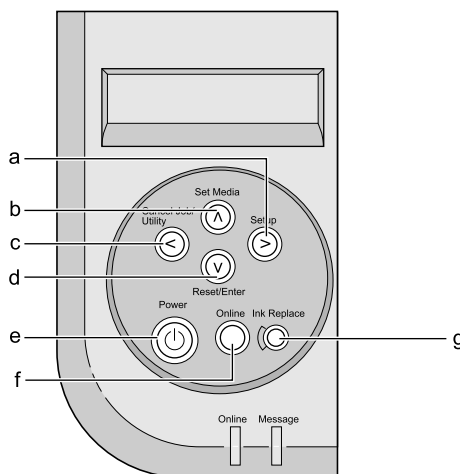


## Note

- If an error message is displayed, note the message and refer to Chapter 6 Troubleshooting “Error Messages”. (→ P.6-11)

## Using the Operation Panel Buttons

The buttons on the operation panel are used for the functions described below.



### a Setup (>) button

Offline:

When the printer is offline, press this button to open the Setup Menu.

Menu display:

In the menu display, press this button to display the next item for selection at the same level.

### b Set Media (▲) button

Offline:

When the printer is offline, press this button to open the Media Set Menu.

Menu display:

In the menu display, press this button to return one level up.

### c Cancel Job/Utility (<) button

During a print job:

To cancel a print job in progress, press and hold down for three seconds.

Offline:

When the printer is offline, press this button to open the Utility Menu.

Menu display:

In the menu display, press this button to return to the previous items for selection at the same level.

#### **d Reset/Enter (✓) button**

Offline:

Press this button to reset the printer.

Press and hold 1 second to cancel data processing or clear the print job data being received from the computer.

Press and hold for 5 seconds to perform a hard reset and cancel data processing or stop the print job data being received from the computer.

Menu display:

Press this button to open the next menu level below.

Item/setting display:

Press to use as an execute key to execute or set the selected function or value.

#### **e Power button**

Press this button to switch the printer on and off.

Printer off:

Press to switch the printer on.

Printer on:

Press and hold for 2 seconds to switch the printer off.

#### **f Online button**

Press the button to set the printer offline and online. To use the menus, you must first press the Online button to set the printer offline.

Printer online:

Press this button to set the printer offline.

Printer offline:

Press this button to set the printer online. However, when an error message is displayed, the printer will not return online until the problem has been corrected.

Error message displayed:

After correcting the problem, press this button to return the printer online.

Menu display:

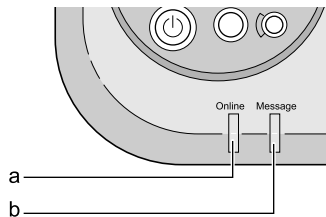
Closes the menu display and returns the printer online.

### **g Ink Replace button**

Press this button to start the procedure to replace an ink tank. After setting the printer offline line by pressing the Online button, press this button to prepare the printer for ink tank replacement and to unlock the right cover.

## ***Reading Operation Panel Lamps***

The lamps on the operation panel indicate the following states.



### **a Online lamp**

On:

Printer is online and ready for operation.

Flashing:

Printer is warming up or busy.

Off:

Printer is offline or power is switched off.

### **b Message lamp**

On:

A warning is displayed.

Flashing:

An error has occurred.

Off:

Printer is ready for normal operation or power is switched off.

# Function Menus

This printer is provided with many built-in functions that can be set with the operation panel or NetSpot. The functions provided by the multi-level menu displays can be accessed with the arrow buttons on the operation panel.

## ***Types of Menus***

The functions are provided in three menus.

### **■ Setup Menu**

Provides functions that allow you to adjust the warning display and printhead or perform settings for the printer interface or network.

### **■ Utility Menu**

Provides functions that allow you to perform important tasks like printing a nozzle check, cleaning the printhead, performing the ink remains display, etc.

### **■ Media Set Menu**

Provides selections for the size and type of paper or other print media loaded in the paper cassettes.

## ***Printer Function Priorities***

Here are some important points to remember about identical features of the operational panel menus, NetSpot menus, and the GARO printer driver:

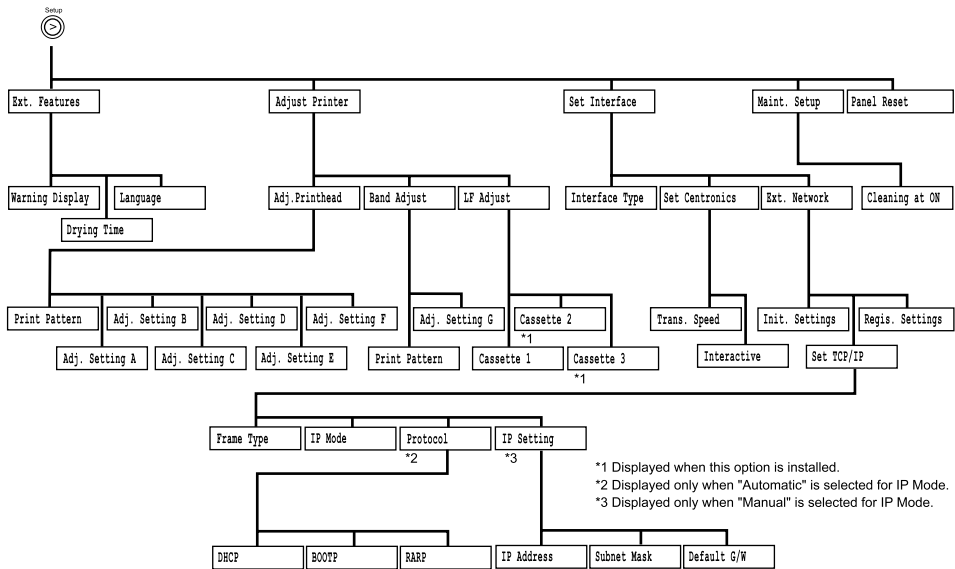
- In cases where different settings are selected for identical features and selections in the operation panel menus, NetSpot menus, and the printer driver, the printer driver settings have priority.
- When different settings are performed for identical selections in the operational panel and NetSpot, whichever setting was performed last has priority.

## Menu Flow Summaries

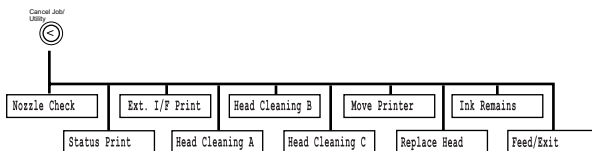
The printer operation panel menus are summarized in the flowcharts below. Use the arrow buttons to display the items on the menus.

- < or > Press < or > to move the previous or next item on the same level.
- ▼ Press ▼ to move to the next level below.
- ▲ Press ▲ to return to the previous level above.

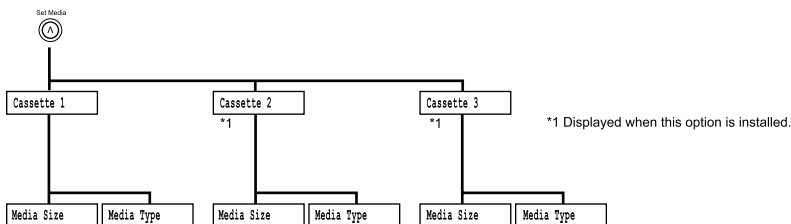
### ■ Setup Menu Flow



### ■ Utility Menu Flow



### ■ Set Media Menu Flow





# How to Perform Menu Settings

To use the function menus, first set the printer offline then use the arrow buttons to display the menu settings.

## ***Setting the Printer Online and Offline***

### ■ Online

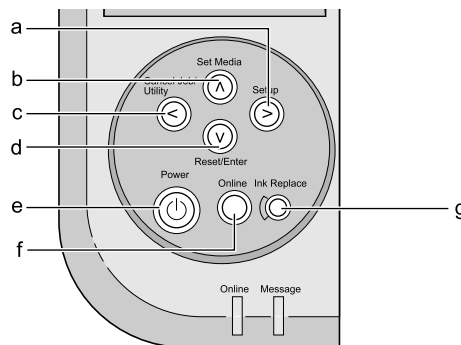
When it is set online, the printer can receive and process a print job sent from the computer. In order to print, the printer must be set online. After the printer is switched on, the printer automatically goes online if no problems occur.

### ■ Offline

When it is set offline, the printer cannot receive a print job from the computer; the offline state is for using the operation panel menus. If a problem is detected, an error message is displayed and the printer is set offline automatically.

## ***Performing Settings***

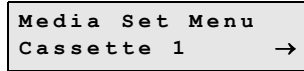
The example procedure below describes how to select the media type for Cassette 1.



- 1** Press and hold the Power button (e) to switch the printer on.  
The printer warms up for a few seconds, “Ready” is displayed, then the Online lamp lights.
- 2** Press the Online button (f). The Online lamp switches off.  
The printer is set offline.

- 3** Press the Set Media button (b).  
The Media Set Menu opens.

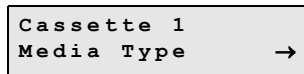
- 4** Press < or > to display “Cassette 1”, then press ▼.



Media Set Menu  
Cassette 1 →

The next menu level is displayed.

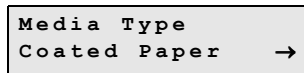
- 5** Press < or > to display “Media Type”, then press ▼.



Cassette 1  
Media Type →

The first setting available for selection is displayed.

- 6** Press < or > to display the desired selection, then press ▼.



Media Type  
Coated Paper →

The current selection is prefixed with an equals sign (=). After pressing ▼ to change the selection, the menu display returns to the previous level above.

- 7** Press the Online button (f) to switch the Online lamp on.  
The printer is set online and is ready for operation.

# Menu Settings Summary Tables

The menus provide the functions listed and described in the tables below. Settings marked with an asterisk (\*) in the tables are the initial or default values.

## Setup Menu

Menu Item	Available Settings	Functions
Ext. Features		
Warning Display	On*, Off	Enables or disables the display warnings.
Drying Time	None, Standard*, Longer, Longest	Adjusts the time interval between printed sheets ejected from the printer to allow more time for the ink to dry.
Language	Jp, Us*, Fr, De, It, Es, Sw, Dk, No, Ni, Fi	Selects the language for the printer operational panel menus and messages.
Adjust Printer		
Adj. Printhead	Print Pattern Adj. Setting A, Adj. Setting B, Adj. Setting C, Adj. Setting D, Adj. Setting E, Adj. Setting F	Adjusts the position of the printhead. First the pattern is printed, then the adjustments for A to F are performed as needed, based on the results of the pattern.
Band Adjust	Print Pattern Adj. Setting G	Adjusts to correct banding in printed images. First the pattern is printed then the G setting is performed, based on the results of the pattern.
LF Adjust	Cassette 1 : -20 ~ 0* ~ +20 Cassette 2 : -20 ~ 0* ~ +20 Cassette 3 : -20 ~ 0* ~ +20	Use this menu to adjust the amount of feed. The setting can be performed for each cassette. If the printed image has white lines, enter a plus (+) value, or if the image has overlapping lines, enter a minus (-) value.
Set Interface		
Interface Type	Centronics*, USB	Allows selection Centronics for a parallel interface connection or USB for a USB connection.
Set Centronics		
Trans. Speed	High Speed*, Medium Speed, Low Speed	Allow selections for speed and format of bi-directional printing. A hard reset must be performed on the printer to enable these settings.
Interactive	ECP*, Nibble, None	

Menu Item	Available Settings	Functions
Ext. Network		
Init. Settings		Executes the initial settings for the “Ext. Network” menu.
Set TCP/IP	Frame Type: Disable, Ethernet II IP Mode: Manual*, Automatic Protocol DHCP: On*, Off BOOTP: On*, Off RARP: On*, Off IP Setting IP Address Subnet Mask Default G/W	Allows selections to set up the TCP/IP network information for the network interface board. After selecting a setting for each TCP/IP item, execute “Regis. Settings” to enable the values selected.
Regis. Settings		Registers the TCP/IP settings selected above for the network interface board.
Maint. Setup		
Cleaning at ON	On*, Off	Determines whether or not the printhead is cleaned when the printer is powered on.*1
Panel Reset		
Panel Reset		Initializes the operation panel menus and restores the default settings. A panel reset does not affect the “Ext. Network” settings.

\*1. If the date and time setting of the computer where the printer is connected are not correct, the printhead may clean itself too frequently and waste ink. Make sure that all the date and time settings on the computer are correct.

## Utility Menu

Menu Item	Available Settings	Functions
Nozzle Check		Prints a nozzle check pattern.
Status Print		Prints a list of the menu items and their current settings.
Ext. I/F Print		Prints a list of all the current settings on the network interface board.
Head Cleaning A		Cleans the printhead nozzles.
Head Cleaning B		Allows ink to flow to the printhead nozzles.
Head Cleaning C		Initializes ink flow to the printhead after printhead installation.
Move Printer		Drains ink from the printhead to prepare the printer for moving.
Replace Head		Performs processing required for replacing the printhead.
Ink Remains		Enables the ink level display for each ink tank.
Feed/Exit		The menu for paper supply and ejection.

## Media Set Menu

Menu Item	Available Settings	Functions
Cassette 1		
Media Size	N1000 : A4, B5-JIS, Letter N2000 : B5-JIS*	Selects the paper size for Cassette 1.
Media Type	Plain Paper*, Coated Paper, Transparency, Quick Dry Tran, Special 5	Selects media type for Cassette 1.
Cassette 2		
Media Size	N1000 : A4, B5-JIS, Letter N2000 : B5-JIS*	Selects the paper size for Cassette 2.
Media Type	Plain Paper*, Coated Paper, Transparency, Quick Dry Tran, Special 5	Selects media type for Cassette 2.
Cassette 3 (N1000 only)		
Media Size	N1000 : A4, Letter	Selects the paper size for Cassette 3.
Media Type	Plain Paper*, Coated Paper, Transparency, Quick Dry Tran, Special 5	Selects media type for Cassette 3.



### Note

- The N1000 is shipped from the factory with the “Media Size” set for “A4” or “Letter”.

# 5

## Maintenance

This chapter describes how to replace consumables and maintain the printer.

# Replacing Ink Tanks

A message in the printer driver screen or in the printer operation panel display warns you when the level of the ink in an ink tank is low to indicate that it is time to replace the ink tank. Of the four ink tanks, Yellow (Y), Magenta (M), Cyan (C), and Black (Bk), each will require replacement when its ink runs low.



## Note

- The following ink tanks are available for replacement:
  - Yellow Ink tank BCI-1201Y
  - Magenta Ink tank BCI-1201M
  - Cyan Ink tank BCI-1201C
  - Black Ink tank BCI-1201Bk

## *When to Replace an Ink Tank*

When either of the two messages below appears, you should have extra ink tanks on hand ready for replacement.

### ■ When the “Ink Check” Message is Displayed

When the ink level in a tank is very low, the ink check message is displayed but printing continues. When this message is displayed, this means that the ink tank will run out of ink very soon. The first letter of the message tells you which tank is running low: Y (Yellow), M (Magenta), C (Cyan), Bk (Black). For example, “Y Ink Check”. After this message is displayed, have the correct color ink tank on hand for replacement.



## Note

- When the ink level in a tank is very low, you may not be able to perform Head Cleaning C, Head Cleaning B, or other head cleaning tasks that consume ink. In such a case, perform printhead cleaning (“Head Cleaning”) after replacing the ink tank.
- When the ink runs out in more than one tank, the mark of each empty tank is displayed one by one.

### ■ When the “Replace Tank” Message Is Displayed

When ink in an ink tank runs out, the replace tank message is displayed and printing halts. You must replace the ink tank after this message appears. The message contains the letter of the tank to be replaced: Y (Yellow), M (Magenta), C (Cyan), Bk (Black). For example: “Replace Y Tank”. Replace the ink tank with a new one of the same color.





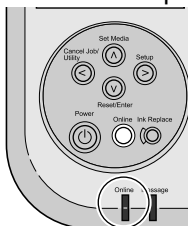
## Note

- When the ink runs out in more than one tank, the mark of each empty tank is displayed one by one. After you replace all the ink tanks of the displayed colors, you can resume printing.

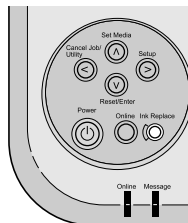
## Replacing an Ink Tank

Follow the procedure below to replace an ink tank. This procedure can be followed to replace any ink tank.

- 1 Press the Online button. The Online lamp switches off.

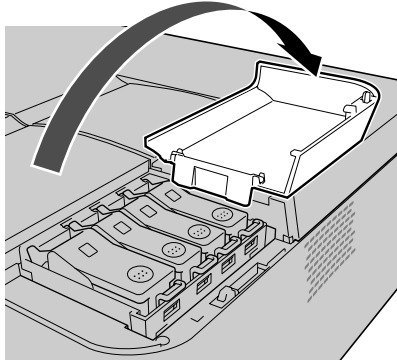


- 2 Press the Ink Replace button.



The right cover unlocks.

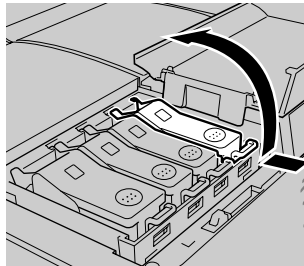
- 3** Open the right cover.



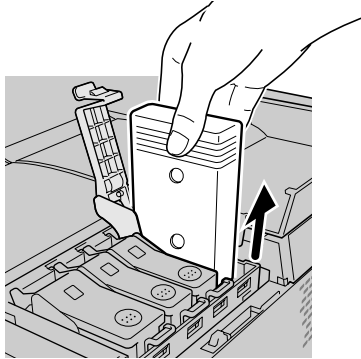
**Important**

- You must follow Step 1, Step 2 to unlock the right cover. To avoid damaging the printer, never try to force the right cover open.

- 4** Push up the ink tank lever of the color ink tank to replace and open the ink tank cover.



- 5** Holding the empty ink tank by the grips on both sides, remove the ink tank.



### Important

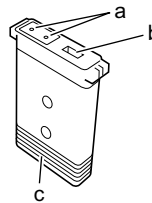
- Place the removed ink tank in a vinyl bag and seal the bag.

- 6** Remove the new ink tank from its package.

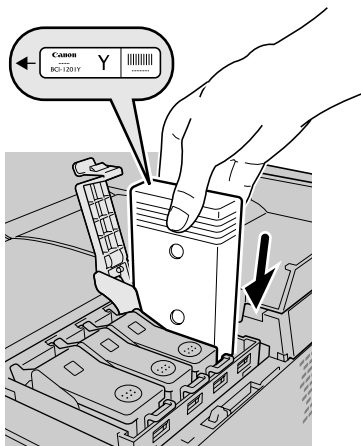


### Important

- Always hold an ink tank by the grips (c) on both sides of the tank.
- To avoid poor printing results and prevent ink spillage, never touch the ink ports (a) or the electrical contacts (b).



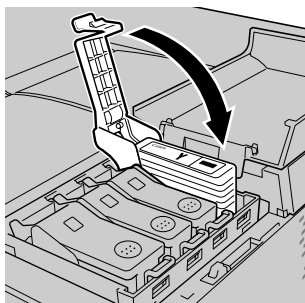
- 7** With the ink supply ports facing down and the label facing in the direction shown below, insert the ink tank into the holder.



## Important

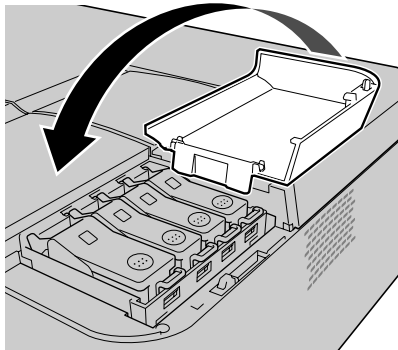
- Always match the color of the ink with the correct holder before inserting it. The ink tank cannot be installed if you try to install it in the wrong holder or position it incorrectly.
- Gently turn the black ink tank side to side, then press in to insert it.

- 8** Close the ink tank cover. Press down on the cover until you hear it click and lock.



- 9** If you need to replace another ink tank, follow Step 4 to Step 8.

- 10** When you are finished replacing ink tanks, close the right cover. Press down on the right cover until you hear it click and lock.



The Online lamp lights and the printer is ready to print. If printing was paused, the interrupted print job continues.



**Note**

- If all the ink tanks were not installed, a message is displayed to tell you which ink tank is missing. For example, “No Y Ink Tank”. Press the Ink Replace Ink button, open the right cover, and install all of the color ink tanks.

# Cleaning the Printer

Periodically clean the printer to ensure quality printing and to avoid problems. Always follow the safety guidelines below when cleaning the printer.



## Warning

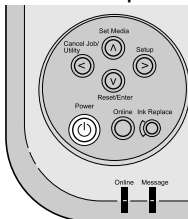
- To avoid minor burns or minor injury from moving parts, before cleaning the printer always press the Power button to switch off the printer then unplug the power cord from the power supply and allow the electrical contacts inside the printer to cool.



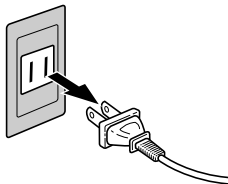
## Caution

- Use only a damp, clean cloth to clean the surfaces of the printer. The electrical contacts inside the printer become hot during normal operation. To avoid a fire or serious electrical shock, never use alcohol, benzene, thinner, or any other type of flammable liquid cleaner to clean the printer.

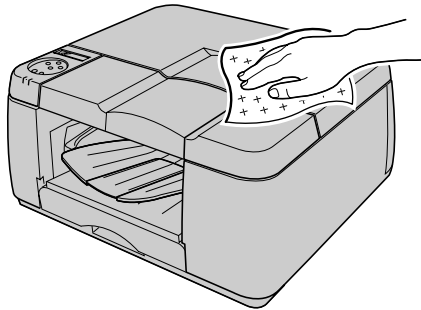
- 1 Press the Power button to switch the printer off.



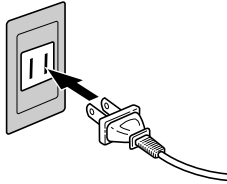
- 2 Disconnect the power cord from the power source.



- 3** Dampen a clean cloth, wring it out thoroughly, then use it to wipe and clean the printer exterior and tray, the paper output tray, and the area around the power connector to remove all dust and paper dust. Use a clean, dry cloth to wipe and dry the cleaned surfaces.



- 4** Plug the power cord into the power source.



# Replacing the Printhead

The printhead normally does not require replacement. However, if two unsuccessful B and C printhead cleanings do not restore high quality printing, or if a Service Call Error is displayed, contact a Help Desk or service center for assistance in replacing the printhead.



## Note

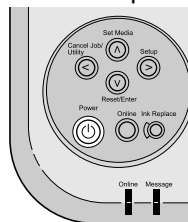
- Contact a Canon service center for details about how to obtain a replacement printhead.

## *How to Replace the Printhead*

To replace the printhead, you must execute the “Replace Head” feature of the Utility Menu and follow the order of the messages on the printer operation panel to complete the following tasks:

- Set the printer offline.
- Execute “Replace Head”
- Remove all ink tanks
- Drain all ink from the printhead then remove the printhead
- Install the new printhead
- Install all ink tanks
- When ink filling processing is completed, press the Online button.

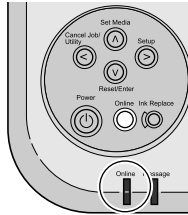
- 1** Press the Power button to switch the printer on.



After a few seconds “Ready” is displayed in the operation panel and the Online lamp lights.

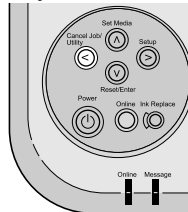


- 2** Press the Online button. The Online lamp goes off.



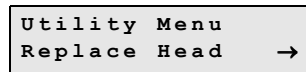
The printer goes offline.

- 3** Press the Cancel Job/Utility button.



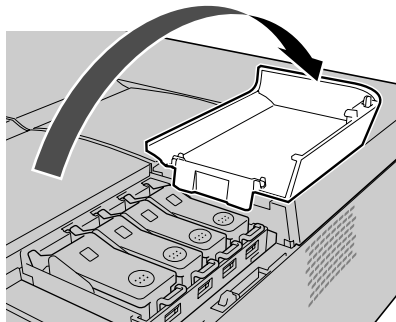
The Utility Menu opens in the display.

- 4** Press < or > to display “Replace Head” then press V.

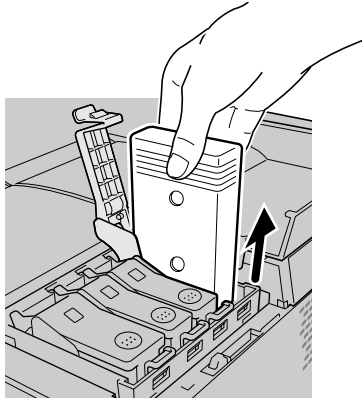


When the message “Remove Ink Tank” is displayed, the right cover is unlocked.

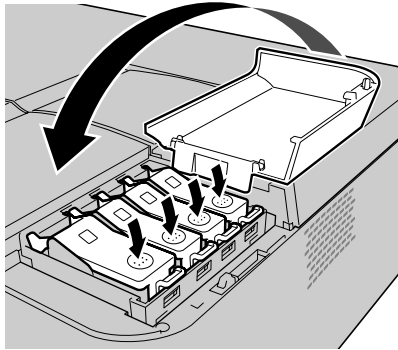
- 5** Open the right cover.



- 6** Open the ink tank covers and remove all the ink tanks.



- 7** Close all the ink tank covers, then close the right cover.



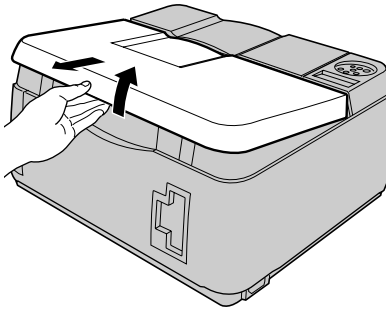
When the display reads “Ink Draining...” this means the ink has started to drain.



**Note**

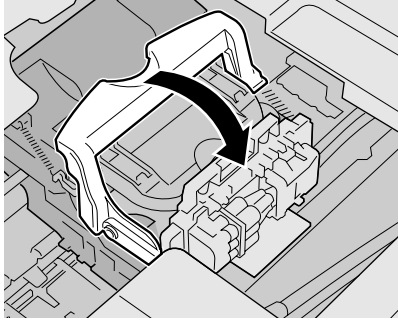
- About three minutes is required for the ink to drain from the printhead.

- 8** When the display reads “Open Cover Back Upper Cover”, open and remove the back upper cover.

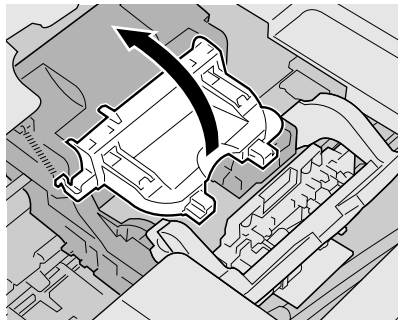


After removing the cover, the display reads “Rep. P.Head OK”.

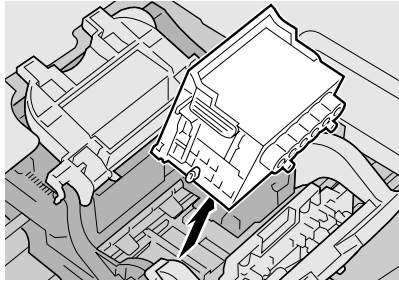
- 9** Pull the printhead lock lever out and lower it completely.



- 10** Raise the printhead lock cover completely.



## 11 Remove the old printhead.



### Caution

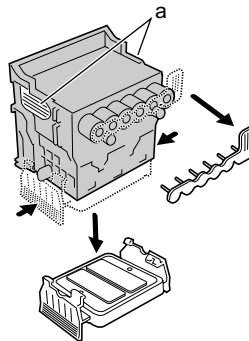
- If the printer was operating before you started to remove the printhead, allow the printer to cool for a few minutes. The metal parts of the printhead become very hot during printing. To avoid minor burns, never touch the metal parts of the printhead.



### Important

- Place the removed printhead in a vinyl bag and seal the bag.

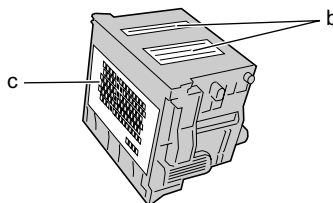
## 12 Hold the new printhead by the grips (a) on both sides, remove it from its package, and remove the protective cap and packing material.





## Important

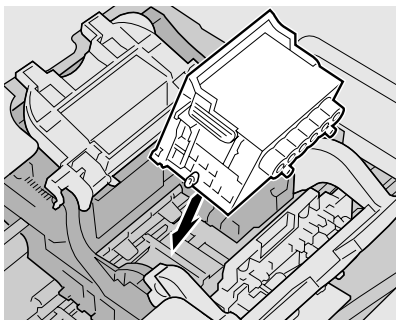
- When handling the printhead, always hold it by the grips (a) on the left and right sides of the printhead.
- To prevent poor results in printing, never touch the exposed nozzles (b) or electrical contacts (c) on the printhead.



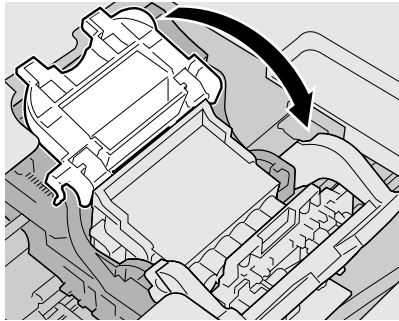
- Never try to re-attach the protective caps or packing material removed from the printhead. Discard these items immediately in compliance with local regulations regarding the disposal of such items.

**13** With the nozzles facing down and the electrical contacts facing in, insert the printhead gently into the carriage below.

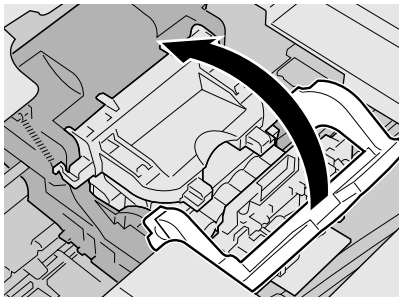
Make sure that the printhead is inserted completely.



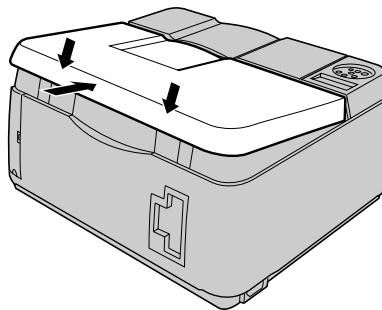
- 14** Pull the printhead lock cover toward you and lower it completely until it locks.



- 15** Raise the printhead lock lever and push in toward the printer until it locks.

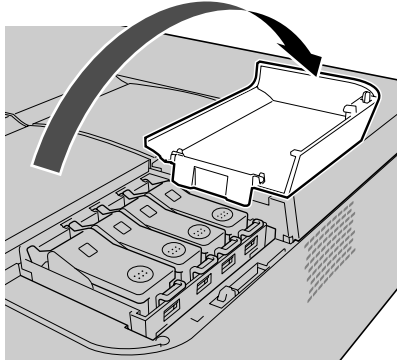


- 16** Re-attach the back upper cover.



On the operation panel “Ins. Ink Tank OK” is displayed and the right cover lock is released. Go on to the next step to install the ink tanks.

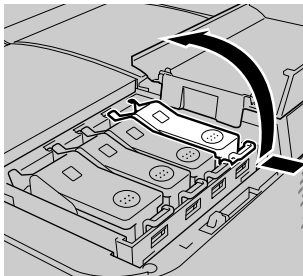
**17** Open the right cover.



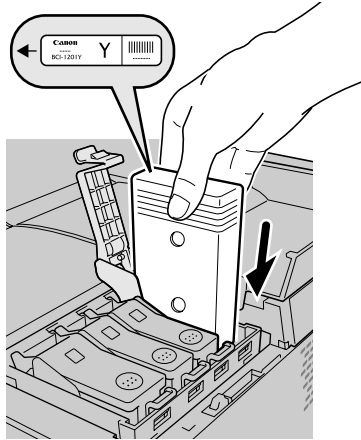
**Important**

- Make sure that the right cover was unlocked at Step 16. To avoid damaging the printer, never force the right cover open.

**18** Push up the lever of the ink tank to replace then open the cover.



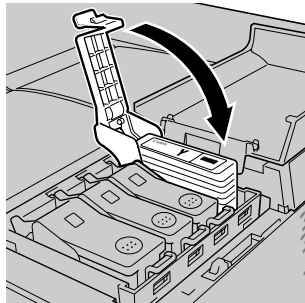
- 19** With the ink ports pointing down and the label facing in the direction shown in the illustration below, insert the ink tank into the holder.



### Important

- Always match the color of the ink with the correct holder before inserting it. The ink tank cannot be installed if you try to install it in the wrong holder or position it incorrectly.
- Gently turn the black ink tank side to side, then press in to insert it.

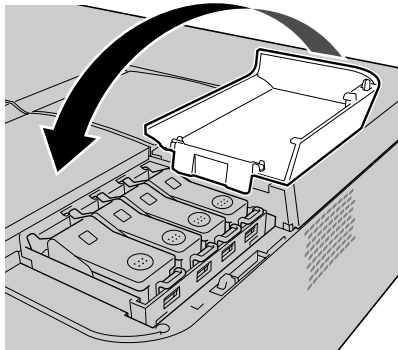
- 20** Close the ink tank cover. Press down on the cover until you hear it click and lock.



- 21** Follows Step 18 to Step 20 to install the other ink tanks.



- 22** After all ink tanks have been installed, close the right cover.  
Press down gently on the right cover until you hear it click and lock.



After installing the printhead and all the ink tanks, “Ink Filling...” is displayed on the operation panel while the ink tanks initialize for operation.



### Important

- If all the ink tanks are not installed, the right cover opens automatically. Make sure that all of the ink tanks are installed.
- Always install the ink tanks immediately after installing the printhead. If the printer is switched off after the printhead is installed without the ink tanks, if the ink tanks are installed after the printer is switched on again, the initial ink filling will not execute automatically. If you make a mistake and switch the power off before installing the ink tanks, switch the power on again, press the Online button to set the printer offline, then execute “Head Cleaning C” with the printer operation panel. (→P.6-23)

- 23** When the display reads “Ready”, press the Online button to set the printer online.

The printer is ready for operation.

- 24** Open the printer driver. On the Device Settings sheet, perform the “Printhead Information” setting.



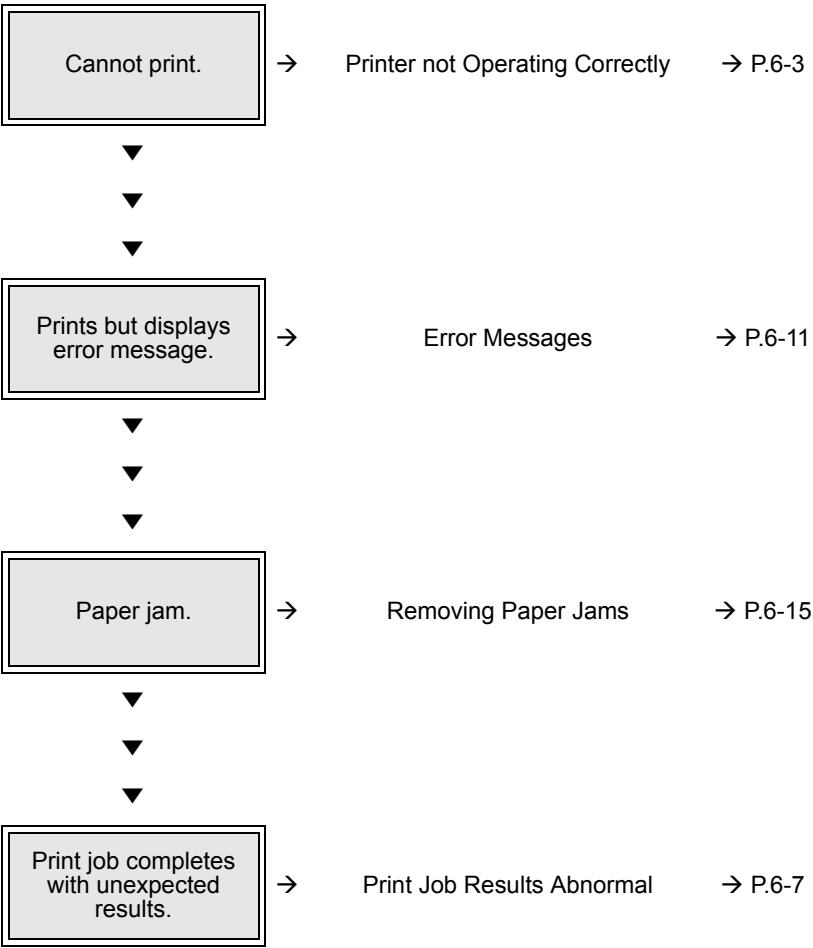
# 6

# Troubleshooting

This chapter describes how to solve problems with the printer.

# Having a problem?

If the printer is not operating as you think it should or if you experience any other problems, read in order through the list below, select the heading that best describes your problem, then go to the referenced page.



# Printer not Operating Correctly

Check the following items when the printer does not operate and will not print.

## ***Cannot Print***

### **Printer not switched on.**

Problem 1: Power button not switched on.

Solution: Press the Power button again to confirm that the Online lamp, Message lamp, and operation panel light. (→P.1-7)

Problem 2: Power cord not supplying power to the printer.

Solution: Confirm that the power cord connections at the printer and the power supply are tight. (→Setup Guide, Chapter 1, “4 Connect the Power Cord”)

Problem 3: Power supply not providing power.

Solution: Connect another device to the power supply to confirm that the outlet is providing power. If not supplying power, check the breaker switches for the power line. If you are on a power strip, determine if there is a switch between the plug receptacle and the main power line.

Problem 4: Power cord broken.

Solution: Call for service and request a new power cord.

### **Printer is on but not online.**

Problem 1: Printhead is not installed.

Solution: Install the printhead. (→Setup Guide, Chapter 1, “5 Install the Printhead”)

Problem 2: Ink tank(s) are not installed.

Solution: Confirm that all ink tanks are installed. (→Setup Guide, Chapter 1, “6 Install the Ink Tanks”)

Problem 3: A cover is open.

Solution: Close the cover named in the message displayed on the operation panel.

Problem 4: Printer is still warming up.

Solution: Immediately after the printer is switched on, it cannot print because it needs a several seconds to warm up. After switching on the printer, you must wait for the Online lamp to light and remain on.

### **Cannot install Windows printer driver.**

**Problem 1:** Incorrect installer CD-ROM mounted.

**Solution:** Mount the installer CD-ROM provided with the printer.

**Problem 2:** Installer CD-ROM is damaged.

**Solution:** Call for service and request a new installer CD-ROM. You can also download the driver from the Canon Home Pages (<http://www.canon.com/>).

**Problem 3:** Windows operating system is unstable.

**Solution:** If Windows displays a system error message such as “General Protection Fault” or “Illegal Operation, the computer system has become unstable. Confirm the problem with the system and try to install again.

**Problem 4:** Installation does not complete successfully.

**Solution:** Open the Printer folder, remove the N1000/N2000 printer icon, then try again. (→Setup Guide)

### **System does not recognize the printer.**

**Problem 1:** Interface cable is disconnected.

**Solution:** If the printer is connected via the parallel or USB port, check the cable connections at the printer and the computer. (→Setup Guide, Chapter 1, “4 Connect the Power Cord”).

**Problem 2:** The parallel port or USB port is not set.

**Solution:** If the printer is connected via the parallel or USB port, the correct port must be selected on the printer operation panel before you can use the printer. (→Setup Guide, Chapter 1, “9 Select the Interface”)

**Problem 3:** Network information for the printer has not be set.

**Solution:** If the printer is connected to a network, perform the network settings with NetSpot or the Remote UI. (→Network Guide)

## ***Printing Does Not Start***

### **No error message is displayed.**

**Problem 1:** Printer is not selected as the destination for the print job.

**Solution:** From the File menu select Print. In the Print dialog box make sure that the printer is selected in the Name box and start the print job again.

**Problem 2:** Print queue has halted.

**Solution:** Open the Printer window and click the printer icon. Open the File menu and click Pause Printing to release the print job from paused printing.

### **Error message is displayed.**

**Problem 1:** Paper jam has occurred.

**Solution:** Remove the jammed paper. (→P.6-15)

**Problem 2:** Printer is offline.

**Solution:** After correcting the problem in response to an error message, be sure to press the Online button to set the printer online.

**Solution:** If the operation panel display reads “Ready”, press the Online button to set the printer online.

**Problem 3:** Error message appears during print job.

**Solution:** When an error message appears in the printer operation panel, read the message and remove the cause of the problem. (→P.6-11)

**Problem 4:** Paper out.

**Solution:** Load paper in the paper cassette or tray designated as the paper supply source.

**Problem 5:** The “Media Size” and “Media Type” selections are not selected for the paper cassette.

**Solution:** Use the printer operation panel to select the correct settings for the “Media Size” and “Media Type” for the paper cassette. (→P.2-12)

**Solution:** If the “Media Type” selection is incorrect, cancel the print job, open the printer driver and select the correct setting for the print media loaded in the paper cassette. (→P.3-3)

**Problem 6:** While printing with paper from the tray or Cassette 1, the tray lever is up

**Solution:** Make sure paper is loaded in the tray or cassette. Make sure that the tray

lever is down. (→P.2-15)

**Problem 7:** An ink tank has run out of ink or the nozzles of the printhead are clogged.

**Solution:** Print a nozzle check pattern to confirm the ink supply and condition of the printhead.

If an ink tank has run out of ink, replace the ink tank. (→P.5-2)

If you determine that the nozzles are clogged, clean the printhead. (→P.6-23)

## ***Printing Halts During Print Job***

### **Error message is displayed.**

**Problem 1:** An error message is displayed during printing.

**Solution:** Read the message displayed in the NetSpot and correct the problem indicated by the error message. (→P.6-11)

**Problem 2:** The selected Media Size is not correct for the media loaded in the paper supply source.

**Solution:** Confirm the current selection for the Media Size. If the setting is not correct, stop the print job, select the correct setting, then start the print job again. (→P.2-7)

**Problem 3:** Bi-directional communication between the printer and computer cannot execute when the printer is connected via the parallel port.

**Solution:** Open the Setup Menu on the printer operation panel, select Set Centronics Interactive then select None. (→P.4-9)

### **Blank paper is ejected from the printer.**

**Problem 1:** A blank page is ejected from the previous print job.

**Solution:** The print job starts after the blank page is ejected.

**Problem 2:** Printhead nozzles are clogged.

**Solution:** Print a nozzle check pattern, check the condition of the printhead nozzles, If you determine that the printhead nozzles are clogged, clean the printhead. (→P.6-23)

**Problem 3:** Printer is damaged.

**Solution:** Call for service.



# Print Job Results Abnormal

If the results you see in the print job is not what you expect, check the items described below.

## ***Poor Print Quality***

### **Printing is faint.**

Problem 1: Printing on the wrong side of the sheet.

Solution: Determine which side is the correct print side. It will not print correctly if printed on the back.

Problem 2: Printhead nozzles are clogged.

Solution: Print a nozzle check pattern, check the condition of the printhead nozzles, If you determine that the printhead nozzles are clogged, clean the printhead.  
(→P.6-23)

Problem 3: Ink filling is not completed.

Solution: If you can see bubbles in the ink hoses, perform Head Cleaning B. (→P.6-23)

### **Ink smeared.**

Problem 1: Printing with high density ink on plain paper.

Solution: Lower the Intensity setting (print density) in the printer driver. (→Printer Driver online Help)

Problem 2: The selected Media Size is not the same as the media loaded in the paper supply source.

Solution: Confirm the current selection for the Media Size. If the setting is not correct, stop the print job, select the correct setting, then start the print job again. (→P.2-7)

### **Edges smeared with ink.**

Problem 1: The selected Media Size is not correct for the media loaded in the paper supply source.

Solution: Confirm the current selection for the Media Size. If the setting is not

correct, stop the print job, select the correct setting, then start the print job again. (→P.2-7)

**Problem 2:** Print media is curled or creased.

**Solution:** Remove the creasing or curling then start the print job again.

### **Black or White Streaks Visible.**

**Problem 1:** Printhead is out of alignment.

**Solution:** When printing on plain paper, use the printer operation panel to perform band adjustment with the “Band Adjust” item. (→P.6-29)

**Problem 2:** The amount of paper feed from the paper cassette that fed is incorrect.

**Solution:** On the operation panel, change the “LF Adjust” setting, then print the image that produced the white lines. Check the printout, then fine adjust the amount of feed. Adjust the amount of feed for each paper cassette. (→P.4-8, P.4-11)

## ***Print Results Do Not Match Print Job Content***

### **Broken lines are visible.**

Problem 1: Printhead is out of alignment.

Solution: Use the printer operation panel to align the printhead with the “Adj. Printhead” feature. (→P.6-26)

### **Random, bizarre characters are printing.**

Problem 1: Data from the print job data stream has been lost.

Solution: Switch the printer and computer off, then switch them on again and start the print job again.

Problem 2: Another printer driver was selected for the print job.

Solution: Select the correct printer driver for the printer and try again. (→Setup Guide)

Problem 3: The computer cannot communicate with the printer by bi-directional data transfer when connected via the parallel port.

Solution: Open the Setup Menu on the printer operation panel, select Set Centronics Interactive then select None. (→P.4-9)

Problem 4: Font selected for printing not supported.

Solution: Make sure that the font used in the text of the software application has been installed correctly. For details, see your software application manual.

### **The Thickness of Lines Is Different**

Problem 1: If you are using Windows XP or Windows 2000, the Fast Graphic Process setting is enabled.

Solution: In the printer driver open the Finishing sheet, open the Special Settings dialog box, then click the Fast Graphic Process check box off, and print again. (→Printer driver online Help)

## ***Colors Wrong***

### **Only one color is printing.**

Problem 1: Grayscale printing is selected in the printer driver for the print job.

Solution: On the Main tab of the printer driver, select Color for the Color Mode and try again. (→Printer Driver online Help)

### **Wrong colors are printing.**

Problem 1: The printer driver is not performing color adjustment.

Solution: Use the printer driver to adjust the colors with the settings on the Color Matching or Color tab of the Color Adjustment dialog box. (→Printer Driver online Help)

Problem 2: Colors in the printout do not match the colors on the screen.

Solution: Perform monitor color correction. (→Monitor Instructions)

Solution: The color management setting in the software application is not set correctly. For details, see your software application manual.

Problem 3: Not enough ink is being supplied to the printhead.

Solution: On the printer operation panel, perform Head Cleaning B. (→P.6-23)

Problem 4: If you are using Windows XP or Windows 2000, the Fast Graphic Process setting is enabled.

Solution: In the printer driver open the Finishing sheet, open the Special Settings dialog box, then click the Fast Graphic Process check box off, and print again. (→Printer driver online Help)

## ***Other Problems***

### **Ink consumption is exceedingly high.**

Problem 1: Date and time settings of the Server or one or more the Client computers in the network where the printer is connected are not correct.

Solution: Check the date and time settings of all the computers and correct the settings so they are the same.

Solution: On the operation panel execute set Cleaning at ON to Off. (→P.4-12)

Problem 2: The printer power cord is being frequently removed and re-inserted into

the power supply.

**Solution:** On the printer operation panel, open the Maint. Menu, and set Cleaning at ON to Off. (→P.4-12)

**Problem 3:** Printing a color image over a large printing area.

**Solution:** Printing a photograph or other large image normally consumes a large amount of ink. This is not abnormal.

## **Error Messages**

### **GARO Error nnnn**

**Problem 1:** A coded error (where “nnnn” is the number) occurred during print job processing.

**Solution:** Press the Online button to set the printer online then try to start the print job again. However, this may not restore normal printing.

**Solution:** Switch off the printer, wait a few seconds, then switch the printer on again, and try to start the print job again.

**Solution:** If normal printing is not restored after following the procedures above, note the number of the error and call for service.

### **Replace x Tank**

**Problem 1:** The ink tank of the displayed color (x = Y, M, C, Bk) has run out.

**Solution:** Replace the color ink tank with a new one. (→P.5-2)

### **x Ink Tank NG**

**Problem 1:** The installed ink tank does not match the color displayed in the message (x = Y, M, C, Bk) and cannot be used in this printer, or an empty ink tank was loaded in the slot.

**Solution:** Read the message and select the correct color ink tank for replacement. Make sure that the ink tank is installed correctly. (→P.5-2)

### **No x Ink Tank**

**Problem 1:** The ink tank of the displayed color (x= Y, M, C, Bk) is not installed.

**Solution:** Read the message and select the correct color ink tank for replacement.  
Make sure that the ink tank is installed correctly. (→P.5-2)

**Problem 2:** A problem has occurred with the ink tank.

**Solution:** Install a new ink tank. (→P.5-2)

### **x Ink Check**

**Problem 1:** Ink in the ink tank of the displayed color (x = Y, M, C, Bk) is running low.

**Solution:** Read the message and select the correct color ink tank for replacement.  
Make sure that the new ink tank is installed correctly.

### **Ext. I/F Error**

**Problem 1:** An error occurred during data transfer at the network interface board.

**Solution:** Press the Online button. However, the print job data stream cannot be printed.

### **Cover Open**

**Problem 1:** The cover named in the second line of the printer operation panel display is open.

**Solution:** Close the appropriate cover.

### **Media Misfeed**

**Problem 1:** Paper or other print media did not feed.

**Solution:** Remove the sheet or stack, load it again, then press the Online button.  
(→P.2-7)

**Problem 2:** Paper has jammed in the printer.

**Solution:** Remove the jammed sheet. (→P.6-15)

**Problem 3:** The job is printing from the tray or Cassette 1 with the manual feed lever raised.

**Solution:** Lower the manual feed lever. (→P.2-15)

**Problem 4:** Transparency sheet (OHP film) could not feed from the paper cassette.

**Solution:** Place 1 sheet of plain paper under the bottom transparency, then set the

transparencies in the paper cassette. (→P.2-10)

**Problem 5:** An extra page (one more than needed for the print job) was not loaded for manual printing.

**Solution:** Always load one more sheet than is required for the print job in the tray when executing a manual print job. (→P.2-18)

### **Service Call**

**Problem 1:** The stopper and tape inside the printer under the back upper cover have not been removed.

**Solution:** Switch off the printer, remove the back upper cover, remove the stopper and tape, then switch the printer on again. (→Setup Guide)

**Problem 2:** A problem has occurred in the printer.

**Solution:** Switch the printer off. Wait three seconds then switch the printer on again.

**Solution:** If the procedures above do not restore normal operation of the printer, read the message, note the message in the lower line of the display, switch the printer off, and call for service.

### **Rep. Waste Ink**

**Problem 1:** The waste ink tank is nearly full and requires replacing very soon.

**Solution:** Call for service.

### **Install P.head Press Online Key**

**Problem 1:** The printhead is not installed.

**Solution:** Install the printhead correctly. (→Setup Guide)

### **Printhead NG Press Online Key**

**Problem 1:** The installed printhead cannot be used with this printer.

**Solution:** Correctly install the printhead designed for this printer. (→P.5-10)

### **No Media:Cass.n**

**Problem 1:** The paper supply in Cassette n (n = 1,2,3) has run out.

**Solution:** Install the size and type of print media named in the second line of the display on the operation panel then press the Online button. (→P.2-7)

**Problem 2:** The Media Size and Media Type set with the printer driver do not match the Media Size and Media Type set with the operation panel (with the N2000, set with the cassette.)

**Solution:** Load paper of the size and type selected for the Media Size and Media Type selections on the Main tab of the printer driver. On the printer operation panel, make sure that the Media Size and Media Type settings for the supply source match the size of the paper, then press the Online button. (→P.2-12)

Use NetSpot or the Remote UI to cancel the print job when you want to release the error and continue with the next print job. The print job cannot be cancelled with the printer operation panel.

### **No Media:Manual**

**Problem 1:** Paper could not feed from the tray.

**Solution:** Load the media in the tray and press the Online button. (→P.2-15)

### **Media Jam**

**Problem 1:** Paper has jammed in the printer.

**Solution:** Remove the jammed media and press the Online button. (→P.6-15)

### **Load Media**

**Problem 1:** The printer is waiting for paper or other print media to be loaded in the tray.

**Solution:** Load the specified print media in the tray and press the Online button. (→P.2-15)

### **Remove Media**

**Problem 1:** The printer is waiting for removal of paper or other print media from the tray.

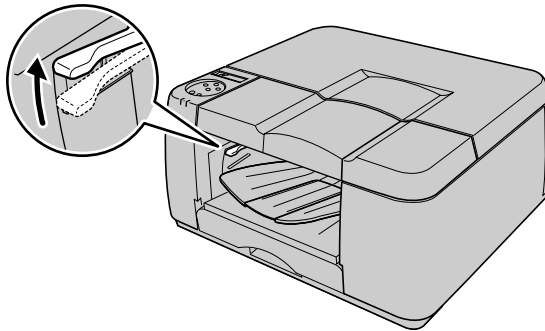
**Solution:** Remove the paper or other print media from the tray and press the Online button. (→P.2-15)



# Removing Paper Jams

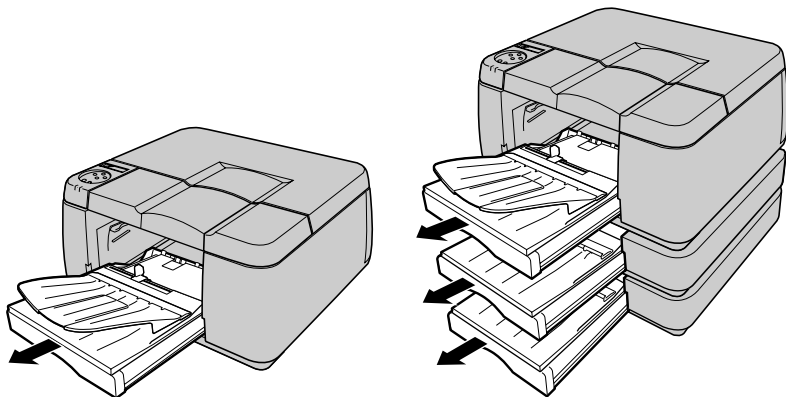
When a paper jam occurs, the “Media Jam” message is displayed on the operation panel and the print job stops. Follow the procedure below to check each location for paper jams and remove the jammed sheets.

- 1** Raise the manual feed lever.

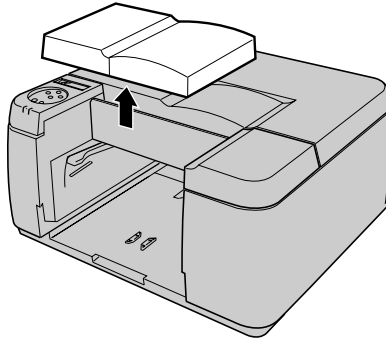


- 2** Remove the paper cassettes.

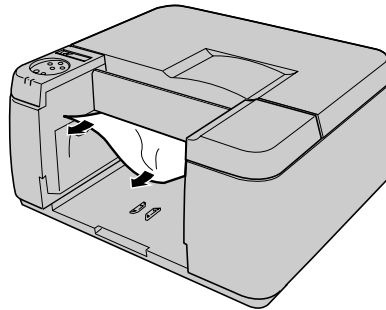
If you are using Cassette 2 or Cassette 3, be sure to remove all the paper cassettes.



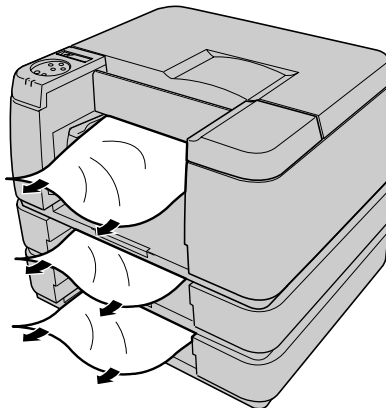
- 3** Remove the front upper cover.



- 4** If you see paper jammed at the paper exit, use both hands to pull the jammed paper out slowly.

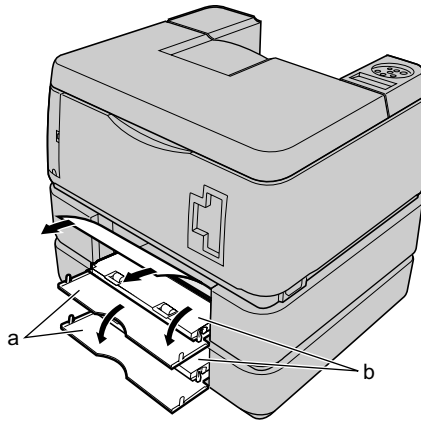


- 5** If you see paper jammed at any paper feed slot, use both hands to pull the jammed paper out slowly.



- 6** If you see paper jammed at the back of the printer where you can access the optional paper cassettes, open the back cover (a) and the back inner cover (b), then remove the jammed paper.

Grasp the knobs on both sides of the back inner covers (b) to open them.



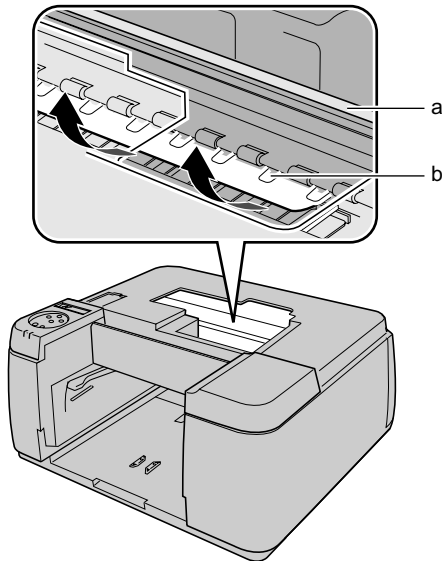
After removing the jammed paper, be sure to close the back covers and back inner covers.



### **Important**

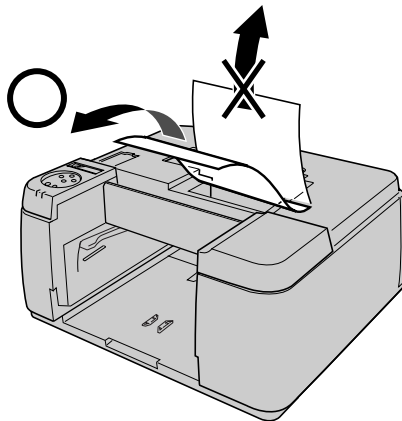
- After you close the back inner covers, push in gently on the knobs on both sides. If the back inner covers are loose, the paper will not feed smoothly.

- 7** If you see pieces of torn paper inside the printer, remove the rear upper cover then use both hands to pull the jammed paper to the front of the printer to remove it.

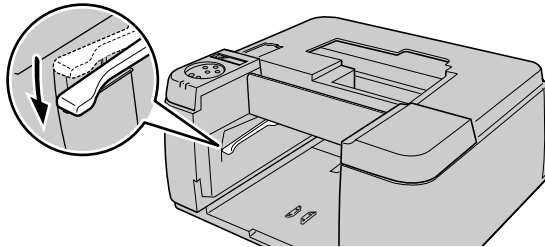


### Important

- Never touch the encoder film (a), and try to avoid touching other parts of the device.
- Try to avoid bending the transparent film (b).
- You must pull the jammed paper to the front of the printer. Pulling it straight up could affect print quality or damage the printer.



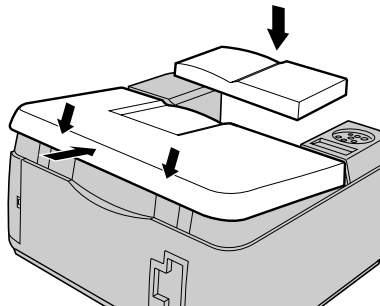
- 8** After removing all of the jammed paper, lower the manual feed lever.



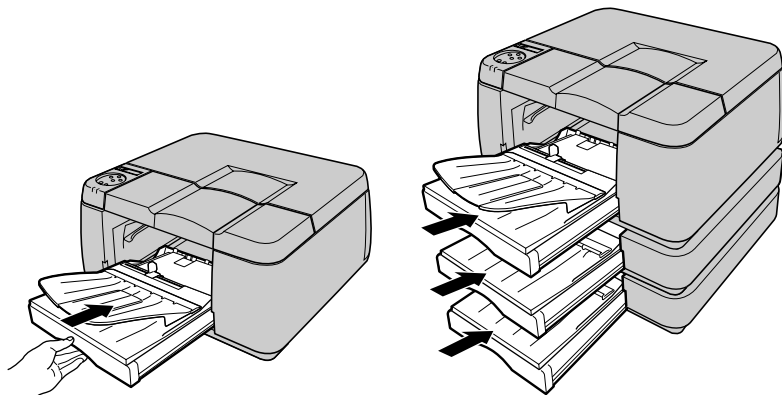
### Important

- If any of the jammed paper has torn during removal, make sure that you remove all pieces of torn paper inside the printer. Torn paper remaining inside the printer could cause more paper jams.

- 9** Attach the front upper cover and the back upper cover.



- 10** Load paper in the paper cassettes and insert the paper cassettes in the printer.



# Performing a Print Test

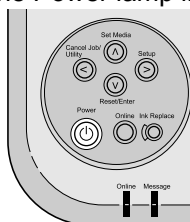
If your printouts become faint or streaked with white lines, print a nozzle check pattern to determine if the print nozzles on the printhead are clogged. Before executing the nozzle check pattern, be sure at least one A4 or letter size sheet of plain paper is loaded for printing.



## Important

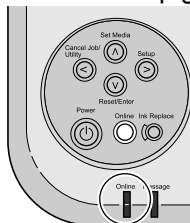
- Always load A4 or Letter size paper in Cassette 1. If paper is not loaded, the pattern will print on the platen and will smear ink inside the printer and onto other paper.
- You do not need to select the media size on the operation panel. The paper is forced from Cassette 1 to print the pattern.

- 1** Press the Power button. The Power lamp lights.



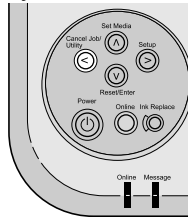
After a few seconds “Ready” is displayed in the operation panel and the Online lamp lights.

- 2** Push the Online button. The Online lamp goes off.



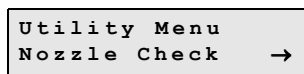
The printer goes off line.

**3** Press the Cancel Job/Utility button.



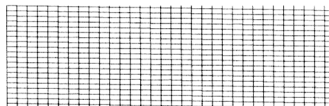
The Utility Menu opens on the operation panel.

**4** Press < or > to display “Nozzle Check” then press V.

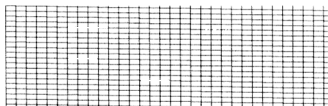


The nozzle check pattern prints. If there are no breaks in the vertical and horizontal lines for each color, the nozzle check pattern is normal.

● Normal Print Pattern



● Abnormal Print Pattern

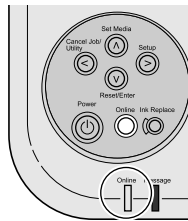


If any of the lines are broken, perform the following procedure:

- Execute printhead cleaning. (→P.6-23)
- Print another nozzle check pattern.

- 5** When you are finished, press the Online button. The Online lamp lights.

The printer is ready to print.





# Cleaning the Printhead

When the ink nozzles of the printhead become clogged, you can restore normal operation by cleaning the printhead.

Cleaning the printhead consumes ink, so clean the printhead only when it is necessary.

## *Types of Printhead Cleaning*

There are three methods for printhead cleaning.

### ■ Head Cleaning A

Perform when the printing is faint or when dust has collected on the printhead. This cleaning method consumes the least amount of ink. Head Cleaning A requires about 3 minutes to complete.

### ■ Head Cleaning B

Perform when the printing is blank or when Head Cleaning A does not correct the problem. Head Cleaning B requires about 4 minutes to complete.

### ■ Head Cleaning C

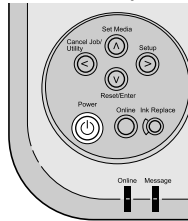
Perform when the printer has not been used for a long period, or when Head Cleaning B does not correct the problem. This cleaning method consumes the most ink. Head Cleaning C requires about 6 minutes.

## *Head Cleaning Procedure*

Follow the procedure below to clean the printhead. The procedure is basically the same for all three methods for cleaning the printhead.

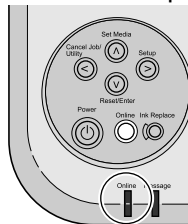
- If one execution of Head Cleaning A does not correct the problem, perform Head Cleaning B.
- If Head Cleaning B does not correct the problem, repeat Head Cleaning B two or three times.
- If three consecutive cleanings with Head Cleaning B does not solve the problem, then perform Head Cleaning C.
- If Head Cleaning C does not restore normal operation of the printhead, then the printhead is damaged and should be replaced. (→P.5-10)

- 1 Press the Power button to switch the printer on.



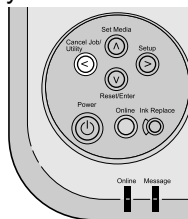
After a few seconds “Ready” is displayed in the operation panel and the Online lamp lights.

- 2 Press the Online button. The Online lamp goes off.



The printer is set offline.

- 3 Press the Cancel Job/Utility button.



The Utility Menu opens on the operation panel.

- 4 Press < or > to select the head cleaning method, then press √.

Utility Menu  
Head Cleaning A→

Head cleaning begins. When head cleaning is finished, the display reads “Ready”.

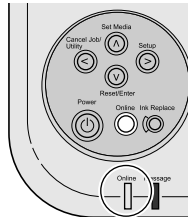
- 5** Print a nozzle check pattern to determine if normal operation has been restored. (→P.6-20)



## Note

- The ink nozzles cannot be cleaned correctly if ink in the tanks is low. Make sure that none of the ink tanks is low.

- 6** When you are finished, press the Online button. The Online lamp lights.



The printer is ready to print.

# Aligning the Printhead

If you notice broken vertical lines or deviation in colors in your prints, print a printhead alignment patterns and align the printhead. Before printing a printhead alignment pattern, make sure A4 or Letter size paper is loaded in Cassette 1.

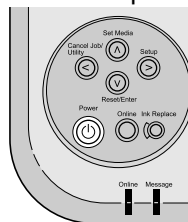
Follow the procedure below to align the printhead.



## Important

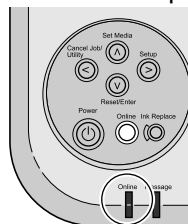
- Always load A4 or Letter size paper in Cassette 1. If paper is not loaded, the pattern will print on the platen and will smear ink inside the printer and onto other paper.
- You do not need to select the media size on the operation panel. The paper is force fed from Cassette 1 to print the pattern.

- 1** Press the Power button to switch the printer on.



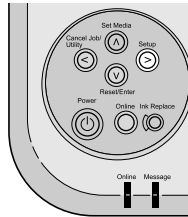
After a few seconds, the display reads “Ready”, and the Online lamp lights.

- 2** Press the Online button. The Online lamp goes off.



The printer is set offline.

- 3** Press the Setup button.



The Setup Menu opens.

- 4** Press < or > to select “Adjust Printer” then press V.

```
Setup Menu
Adjust Printer →
```

- 5** Press < or > to select “Adj. Printhead” then press V.

```
Adjust Printer
Adj. Printhead →
```

- 6** Press < or > to select “Print Pattern” then press V.

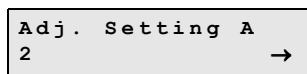
```
Adj. Printhead
Print Pattern →
```

The printhead alignment pattern prints.

- 7** Press < or > to select “Adj. Setting A” then press V.

```
Adj. Printhead
Adj. Setting A →
```

- 8 Look at “A” on the printhead alignment pattern and determine the number of the vertical line that is least conspicuous. Press < or > to display that number then press V.



The selected setting is prefixed with an equals sign (=) to denote the current setting for A.

- Patterns A, B, C, E, F

Vertical Lines Conspicuous



Vertical Lines Inconspicuous



- Pattern D

Misaligned

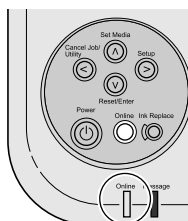


Aligned



- 9 Repeat Step 7 to Step 8 to adjust the settings for B to F.

- 10 When you are finished, press the Online button. The Online lamp lights.



When the display reads “Ready”, the printer is ready to print.

# Correcting Banding

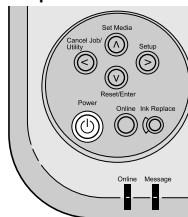
Follow the procedure below if you see white stripes or dark color stripes appear when printing on plain paper. Before printing a printhead alignment pattern, make sure A4 or Letter size paper is loaded in Cassette 1.



## Important

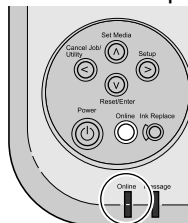
- Always load A4 or Letter size paper in Cassette 1. If paper is not loaded, the pattern will print on the platen and will smear ink inside the printer and onto other paper.
- You do not need to select the media size on the operation panel. The paper is forced from Cassette 1 to print the pattern.

- 1** Press the Power button. The printer switches on.



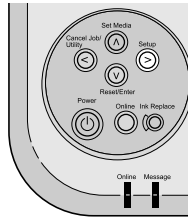
After a few seconds, the display reads “Ready”, and the Online lamp lights.

- 2** Press the Online button. The Online lamp goes off.



The printer is set offline.

- 3** Press the Setup button.



The Setup Menu opens in the display.

- 4** Press < or > to display “Adjust Printer” then press V.

```
Setup Menu
Adjust Printer →
```

- 5** Press < or > to display “Band Adjust” then press V.

```
Adjust Printer
Band Adjust →
```

- 6** Press < or > to display “Print Pattern” then press V.

```
Band Adjust
Print Pattern →
```

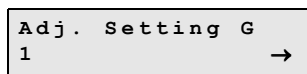
The banding correction print pattern prints.

- 7** Press < or > to display “Adj. Setting G” then press V.

```
Band Adjust
Adj. Setting G →
```

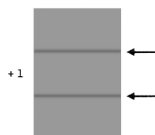


- 8** Look at the banding correction pattern and determine the number of the vertical line that is least conspicuous. Press < or > to display that number then press ▼.

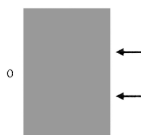


The selected setting is prefixed with an equals sign (=) to denote the G value for banding adjustment.

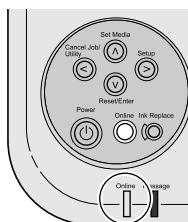
Lines conspicuous



Lines inconspicuous



- 9** When you are finished, press the Online button. The Online lamp lights.



When the display reads “Ready” the printer is ready to print.



# 7

## Other Important Information

This chapter describes options, specifications, and provides other information.

# Options

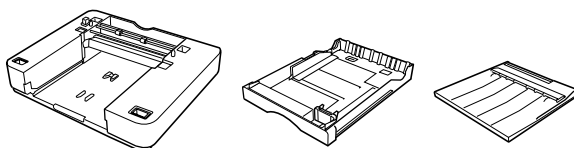
The following options can be used with this printer.

## ***Paper Feed Units***

A paper feed unit is installed below the printer to hold an additional paper cassette. Two paper cassettes can be added to the N1000 and one can be added to the N2000. The printer can switch automatically between the paper cassettes as alternate paper sources.

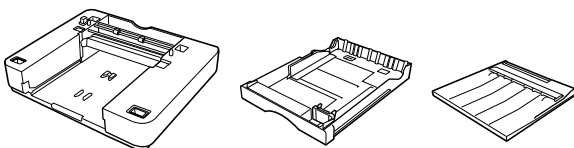
### Paper Feed Unit (PFN-12)

The paper feed unit for Cassette 2 of the N1000.



### Paper Feed Unit (PFN-13)

The paper feed unit for Cassette 3 of the N1000.

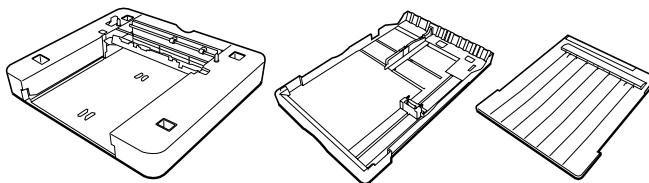


## **Note**

- If you intend to add only one paper cassette to the N1000, use PFN-12.
- You cannot use two PFN-12 units with the N1000. To add a second paper cassette, you must use the PFN-13

### Paper Feed Unit (PFN-22)

The paper feed unit for Cassette 2 of the N2000.

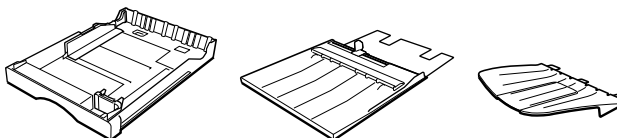


## Universal Cassettes

These paper cassettes can be used interchangeably in the main body of the printer or with optional paper feed units. Two universal paper cassettes can be used as Cassette 1, one as Cassette 2, and one as Cassette 2 or 3.

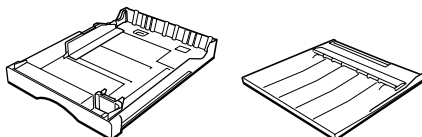
### Universal Cassette UCN-11

For Cassette 1 of the N1000



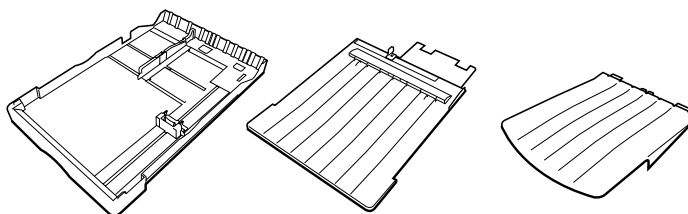
### Universal Cassette UCN-12

For Cassette 2 or Cassette 3 of the N1000



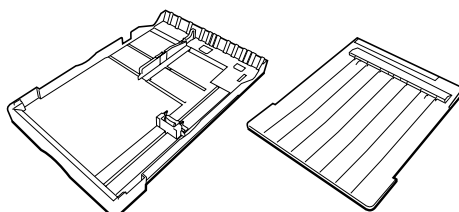
### Universal Cassette UCN-21

For Cassette 1 of the N2000



### Universal Cassette UCN-22

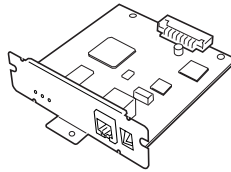
For Cassette 2 of the N2000



## ***Network Interface Board***

This is the optional 10BASE-T/100BASE-TX interface board to add a LAN port to the N1000 or N2000. This board is compatible with the standard slot provided on the printer. This board can be used with a wide range of computers because it supports the use of the following protocols: TCP/IP, NetWare<sup>®</sup>, and NetBEUI. Also built into this board is a Remote UI function that can be set up with a Browser from any computer connected to the LAN.

Network Interface Board NB-11FB



# Uninstalling the Software

Follow the procedure below to uninstall the printer driver and utilities from computer.

## ***Uninstalling the Printer Driver***

Follow the procedures below to uninstall the printer driver.

- 1** On the desktop click the Start button, point to Settings, then click Printers.  
The Printers window opens.
- 2** Click the icon of the printer, then from the File menu select Delete.
- 3** Follow the onscreen messages.  
The printer driver is uninstalled.

## ***Uninstalling NetSpot Suite Service***

Follow this procedure to uninstall NetSpot Suite Service from a Windows system connected to the printer via a USB port.

- 1** On the desktop, click Start, point to Settings, then click Control Panel.  
The Control Panel window opens.
- 2** Double-click the Add/Remove Programs icon.
- 3** From the list of software applications, select NetSpot Suite Service, then click the Add/Remove button.  
A confirmation message is displayed.
- 4** Click the Yes button.  
NetSpot Suite Service is removed from the system.

## ***Uninstalling NetSpot***

Follow the procedures below to uninstall NetSpot.

- 1** On the desktop click the Start button, point to Settings, then click Control Panel.

The Control Panel window opens.

- 2** Double-click the Add/Remove Programs icon.

- 3** Select NetSpot from the list of software applications then click the Add/Remove button.

A message prompts you to confirm the deletion.

- 4** Click the Yes button.

NetSpot is removed.

## ***Uninstalling the LPR Port***

- 1** Use the printer driver to select and set the printer for any port ("Print to the following port") other than Canon LPR Port.

This selection can be performed on the Details sheet of the Printer Properties dialog box.

For the CANON LPR Port, "172.20.88.196@LP (Canon LPR Port)" is displayed.

- 2** Mount the software CD-ROM in the CD-ROM drive.

- 3** Double-click and execute Uninstlp.exe in the Lprport.

- 4** Follow the messages onscreen to complete removal of the LPR Port.



## ***Uninstalling NetBIOS/NetBEUI Port Monitor***

- 1** On the desktop click the Start button, point to Settings, then click Control Panel.
- 2** Double-click the Add/Remove Programs icon.
- 3** Select the utility by name from the list of software applications then click the Add/Remove button.  
A message prompts you to confirm the deletion.
- 4** Click the Yes button.  
NetSpot is removed.

# Specifications

	N1000	N2000
Print Capacity		
Print Method	Serial Bubble Jet	
Print Speed	Black (Draft) mode: 20 ppm (A4 text pattern) Color (Draft) mode: 18 ppm (A4 DTP pattern)	
Max. Resolution	2400 x 1200 dpi	
Interface		
Parallel Interface*1 (IEEE1284)	1 port	1 port
USB Interface*1 (1.10 Compliant)	1 port	1 port
Network Interface (10base-T/100base-TX)	Standard model: Option Network model: 1 port	Standard model: Option Network model: 1 port
Interface Connector	Parallel Interface: Amphenol 57-40360 Recommended cable Composition: AWG28 or more Type: Shielded twisted pair Length: Max. 2.0 m (6.6 ft.) Connector: Amphenol 57-30360	
	USB Interface: USB Standard Series B Receptacle Recommended cable Composition: AWG28 or more Type: Shielded twisted pair (full-speed compatible) Length: Max. 5.0 m (16.4 ft.) Connector: USB Standard Series B Plug	
Replaceable Ink Tanks		
Yellow Magenta Cyan Black	BCI-1201Y BCI-1201M BCI-1201C BCI-1201Bk	
Print capacity	Black: 2,800 pages (5% duty) Color: 3,400 pages (5% duty, each color)	
Main Unit		
Power source	AC100 – 127 V 50/60 Hz	
	AC220 – 240 V 50/60 Hz	
Power Consumption	Less than 44W (during printing) Less than 15W (during printing)*2	Less than 44W (during printing) Less than 15W (during printing)*2
Noise (Operation)	Approx. 46 dB (A) (No optional cassettes installed, with High mode selected for Print Quality on the Main sheet of the GARO Printer Driver.)	Approx. 47 dB (A) (No optional cassettes installed, with High mode selected for Print Quality on the Main sheet of the GARO Printer Driver.)
Operating environment	5 ~ 35 °C (41 ~ 95 °F), 10~90% RH with no condensation	

	N1000	N2000
Dimensions (Standard)		
Standard	465 x 440 x 207 mm (w x d x h) 18.3 x 17.3 x 8.1 in. (w x d x h)	587 x 626 x 209 mm (w x d x h) 23.1 x 24.6 x 8.2 in. (w x d x h)
Cassette 2	465 x 440 x 310 mm (w x d x h) 18.3 x 17.3 x 12.2 in. (w x d x h)	587 x 626 x 312 mm (w x d x h) 23.1 x 24.6 x 12.3 in. (w x d x h)
Cassette 2 + Cassette 3	465 x 440 x 413 mm (w x d x h) 18.3 x 17.3 x 16.3 in. (w x d x h)	—
Weight (including paper cassettes, printhead, ink tanks)		
Standard	Approx. 13 kg (28.6 lb.)	Approx. 16 kg (35.2 lb.)
Cassette 2	Approx. 17 kg (37.5 lb.)	Approx. 22 kg (48.6 lb.)
Cassette 2 + Cassette 3	Approx. 21 kg (46.4 lb.)	—

\*1. Use an interface cable up to 2 m (6.6 ft.) long.

\*2. This is the maximum consumption with Cassette 3 installed. With the power supply off, a small amount of power is consumed. To power off the printer completely, switch the printer off and disconnect the printer power cord from the power source.

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